

tieman of St. Louis, Mr. E. C. Simmons, took the ground that the members of the league were making a mistake in advocating the Cullom bill, and suggested that the preferable way out of present difficulties was to abolish the Interstate commerce commission. He was called to task for arguing the question in a convention called for the express purpose of endorsing the bill, and finally withdrew from the meeting with the announcement that he would be found at Washington opposing the bill. Mr. Simmons will not be the only one found at Washington opposing the bill, nor will persons at Washington be the only ones opposing. For many months the question has been debated, and the consensus of opinion on the part of individuals who do not look upon the railroads as prey for politicians is that the demand for the amendment is rather a confession of weakness on the part of the interstate commerce commission, and that the adoption of the amendment, carrying with it practically a gift of power to the commission to attempt to regulate the operations of the great railroad systems of the country, would result in demoralization of transportation systems and loss both for railroad owners and users of railroads. The opposition to the bill will not be called to task at Washington. It will be given a chance to be heard, and, it is hoped, to be heard effectively.

Truths of Commerce.

At the annual banquet of the New York Chamber of Commerce last week President John K. Cowen of the Baltimore & Ohio Railroad, in the course of a speech on the transportation interests of the Atlantic seaboard, made a suggestion which New York might consider with profit. He contended that New York could not divert from other ports upon the Atlantic any considerable part of their export trade without injury to New York city itself, and that it was to the interest of New York that every other city upon the Atlantic capable of maintaining a foreign commerce should have its share of it, inasmuch as the financial power of New York city depends upon having the welfare and development of the country widely diffused. Every part of the United States and every seaport city and the railways contribute to the financial supremacy of that city.

These suggestions ought to impress upon New York the necessity for a relaxation of its efforts to monopolize the country's commerce. Conditions arising partly from the enterprise of New York, but largely in the direction taken by the growth of population in this country, gave New York many years ago an advantage in trade and commerce which has made it the metropolis of the country. Later developments, however, such as the construction of great lines of north and south railways, bringing other ports on the Atlantic and the Gulf ports into close touch with the fields of American production, have tended to restore the equilibrium of American trade, without, however, driving New York from its leadership in commerce, but, on the other hand, vastly adding to its financial importance. The growth of commerce at other ports should have the effect of increasing their financial importance, but here again the leadership of New York is not threatened.

It is a short-sighted policy which seeks by artificial means to maintain conditions no longer justified by circumstances. Success of such a policy

may mean immediate gain, but in the long run it will bring serious damage. It is difficult to develop any part of the human body abnormally without seriously affecting other parts and undermining the whole system. So with the country, the healthy growth of the whole depends upon equal development of all its parts. If any of the parts suffer the whole must be affected, and ultimately those parts which have been given undue advantage must meet decay.

Regulating Cotton Prices.

One of the most practical addresses before the Interstate Cotton-Growers' Association at Macon last week was by Mr. Pope Brown, president of the Georgia Agricultural Society. Discussing the cotton problem he said:

Two years ago we started a wheat movement. The result was that hundreds of thousands of bushels of wheat have since been raised in this State. It has put hundreds of thousands of dollars into the pockets of the farmers. How can we cheapen the cost of production of cotton or raise the price of it? We have got to do one or the other. The man that does the plowing is entitled to a good living. Land is cheap. The farmer can raise his mule cheaper than he can buy him, he can raise his flour cheaper, his meat cheaper. The Southern farmer has not done his duty until he has produced the food for the city people and stopped the importation of every necessity of life into this section.

Where cotton-growers' conventions bring forth such practical advice as this they do good. It is advice which has been given for several years, and which has been adopted here and there with beneficial results to the adopters, whatever the effects may have been upon those persons who failed to follow it. The question of the profitable price of cotton rests, after all, upon the individual grower. He may be able to spare time to attend conventions and to listen to the discussion of plans for united action of cotton-growers with a view to controlling the market. Yet, in spite of efforts more or less spasmodic during fifty years in this direction, no plan has been devised whereby the cotton-growers have been led to united action. In the nature of the case such action is extremely difficult, if not impossible, as long as individual growers are guided in their operations by what their neighbors may be doing, or by reports of what growers in distant parts may be doing. It remains for the individual to adapt himself to circumstances, and if he finds that he is losing money in the long run and accumulating debt in making cotton his leading crop, to turn his energies into making a living at home and raising cotton as a surplus.

The Southern Farm Magazine.

In the Southern Farm Magazine for December is published a brief paper on cotton and colleges, in which President Henry S. Hartzog of Clemson College, S. C., discusses suggestively and, it is hoped, with practical possibilities the mutual relations of cotton manufacturing and education. His argument is that colleges have to depend to some extent for their support upon voluntary contributions, endowments and government aid; that comparatively few colleges in the South have advanced as they should have because of the lack of wealth in that section, and that, therefore, an industrial movement which promises to enrich the South is being watched with affectionate interest by everybody interested in higher education. He points to the establishment of textile schools as an aid to the development of manufac-

turing, and contends truly that they have the right to look to the mills primarily for sympathy and support; that for centuries to come schools and factories must exist together in the South; that the colleges realize that industrial development means an expansion along educational lines, and that therefore mills and schools have mutual interests. "Millets for the South," by Col. J. B. Killebrew; "Permanent Pasture and Hay," by Paul F. Kefauver of Tennessee, and "Stock-Raising in South Carolina," by Prof. C. M. Conner of Clemson College, are kindred subjects, treated from the practical and scientific standpoints, appealing to an increasing number of readers in the South, while the paper by Hon. Carroll D. Wright is of timely importance. Editorially are discussed methods to keep cotton-raising upon a paying basis, the relations of railroads and farmers, the necessity for less legislation and other topics of moment, while the other regular departments are full of entertainment for young and old. The Southern Farm Magazine continues its offer in December to new subscribers. The regular subscription price is \$1 a year, but those who subscribe before December 31, 1900, will be charged but twenty-five cents.

The Southern Farm Magazine is published monthly by the Manufacturers' Record Publishing Co., Baltimore, Md.

Water-Power Wanted.

The Buffalo & Niagara Investment Co., Prudential Building, Buffalo, N. Y., advises the Manufacturers' Record that it has a client desiring a water-power in the South of a minimum of 800 horsepower. A deposit of carbonate of lime near such a water-power would be an important feature in the matter.

TO LAY THE CORNERSTONE.

Formal Beginning of Work on the Charleston Exposition.

The board of directors of the South Carolina Interstate and West Indian Exposition has issued a business-like invitation to the ceremonies attending the laying of the cornerstone of the main Exposition building at Charleston on December 11. This will occur during the meeting of the League of American Municipalities in Charleston, and invitations will be extended by the Exposition authorities to these visiting mayors. The mayor and aldermen of the city of Charleston will also be invited to attend, and invitations will also be extended to the Grand Lodge of South Carolina and to all honorary vice-presidents of the Exposition Company and to the commissioners in this and in other States.

A most interesting feature of the occasion will be the attendance at these ceremonies of a party of twelve gentlemen from New York, who have consented to act as an advisory board in consultation with Mr. Bradford L. Gilbert, the architect-in-chief of the Exposition, in all matters of taste connected with the architecture of the buildings and their decoration and the laying out of the grounds. This party will be met at the station by a committee, who will escort them to their hotel and will give them every facility for seeing the city and studying the site of the Exposition before the time for the ceremonies of the day, which will begin at 2 P. M.

It has been suggested that all the military companies of the city shall join in a parade, thus adding brilliancy to the scenes upon the streets during the day, and that a floral parade shall also take place, and that the different trades and industries of the city be also represented by interesting and suggestive floats.

The Exposition grounds are situated about one mile and a-half from the business center of the city, on the banks of the Ashley river. They consist of about 160 acres of well-wooded and slightly rolling country, admirably adapted as a background for such buildings as it is proposed to erect there. Great, moss-hung oaks, centuries old, already add dignity and natural beauty to the scene. On the west flows the broad and sparkling Ashley, and there stands, surrounded by green lawns and groves, an old colonial home upon the grounds, which shall furnish quarters for the Woman's Department of the Exposition later on.

Arrived at the spot where it is proposed to erect the Administration Building, an address will be delivered by the president of the Exposition Company, who shall then request the mayor of Charleston to preside in his stead. Then shall follow addresses by the governor of South Carolina, by the governor of Georgia, by Senator Tillman, and after this the cornerstone will be laid by the Grand Master of the Masons, who shall also deliver an address.

This will close the ceremonies of the day at the grounds, but it is understood that a banquet will be tendered the visitors at night and that the next day will be spent by them in visiting the various interesting and historic spots which abound in the city of Charleston and in its immediate neighborhood.

THIS COUNTRY'S MINERALS.

Enormous Products of Mines of the United States Last Year.

In the statement of the mineral production of the United States, just issued, by Dr. David T. Day, chief of the division of mining and mineral resources of the United States geological survey, it is shown that the total value of all the minerals produced during the last year amounted to \$976,008,946. The value of the mineral products in 1898 was \$697,820,720, compared with which the production in 1899 shows an increase in value of \$278,188,226, or practically 40 per cent. This increase in both amount and percentage was the most notable in the history of the mineral industry of the United States. The production from 1890 to 1898 has exceeded \$600,000,000 in every year except two, which were the panic years of 1893 and 1894. The average yearly production from 1890 to 1898, inclusive, was \$618,286,510, so that the production in 1899 was \$357,722,436, or 58 per cent., in excess of the average production of the preceding nine years.

The greatest increase in 1899 was in the value of the pig-iron product, which increased from \$116,557,000 in 1898 to \$245,172,654 in 1899, or about 110 per cent., although the product itself increased only 1,846,769 tons, or not quite 16 per cent. The enormous increase in the value of the pig-iron product was due to the phenomenal demand and high prices which ruled during the greater part of the year.

The next greatest increase was in the production of coal, which added over \$48,000,000 to the value of the product in 1899. This was an increase of a little over 23 per cent. Next in importance was copper, which showed an increase of nearly 60,000,000 pounds in quantity and of over \$42,000,000 in value, the ruling prices of copper for 1899 being higher than for a number of years past. Next in importance is the production of crude petroleum, which advanced nearly \$20,500,000, or about 45 per cent., over the value of the preceding year, and this increase was also due principally to advanced prices, as the production increased

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only 1,700,000 barrels, or less than 4 per cent. The value of the natural gas consumed in 1899 is placed at a little over \$20,000,000, against \$15,300,000 in 1898. This increase was due entirely to the higher prices charged by the producers for the gas consumed, as the amount obtained each year is steadily declining.

An increase of about 10 per cent., or from \$64,463,000 in 1898 to \$71,053,400 in 1899, is shown in the production of gold, as reported by the director of the mint. The production of silver showed a very small increase as compared with the preceding year. There was a decrease of 6 per cent. in the amount of lead produced in 1899, but an increase of over \$2,000,000 in its value. Spelter increased from 115,399 short tons, valued at \$10,385,910, to 119,408 short tons, valued at \$13,731,920. The building-stone industry showed an increase in value of nearly \$8,000,000.

The total value of the metallic products in 1899 was \$527,218,084, against \$343,400,955 in 1898, an increase of \$183,817,129, or 54 per cent. The total value of the non-metallic products increased \$94,371,097, or 27 per cent., from \$353,419,765 in 1898 to \$447,790,862 in 1899. In every year since 1881 to 1898, inclusive, the value of the non-metallic products has exceeded that of the metallic products. In 1880, however, the metallic products were worth \$16,300,000 more than the non-metallic products. In 1899 the metallic products exceeded that of the non-metallic products by \$79,500,000. In 1898 the metallic products were less than the non-metallic products by \$10,000,000, so that there has been a change of nearly \$90,000,000 in the relative values as between 1898 and 1899.

MEXICO DEMANDS COAL.

Need of More Cars to Haul Fuel From United States.

[Special Cor. Manufacturers' Record.]

Monterey, Mexico, November 20.

On account of the large number of smelters, factories and railroads in this city, State and adjoining cities and States, the scarcity of coal and coke is beginning to be seriously felt. The only coal mines that are operated in the republic are what are known as the Huntington mines, on the line of the Mexican International Railroad, and in the State of Coahuila. Those mines are operated by the Mexican Coal & Coke Co. But so great has been the demand for those two commodities that the mines do not begin to supply the demand.

Soon after the smelters were started in this city they received the bulk of their coal and coke supply from Great Britain. But on account of the advance of coal and coke in that country they had to look to the United States for their supply, and for the past eight years they have been receiving their supplies of coal and coke from Alabama and West Virginia. But what confronts them now is the inability of the railroads, for lack of cars, to haul the goods to this country. If there are not more coal mines opened and developed in the Coahuila coal district many manufacturing industries will have to close down.

A branch of a trust company in which Mr. A. E. Stilwell, president of the Kansas City, Mexico & Orient Railroad Co., is interested has been established in Mexico, prominent Mexicans and American capitalists who reside in Mexico being associated with him. Senors Alonzo Fernandez and Lorenzo Elizaga of the City of Mexico and Mr. A. E. Milligan of Durango are three of them. Senor Fernandez is a brother-in-law of President Diaz and president of the Mexican Senate, and Senor Elizaga is a nephew of the President and a senator.

Since the first of the month the Mexican International and the Mexican National railroads have been doing a rushing business. The latter road has brought in large quantities of lumber for Monterey, Saltillo and the interior. They have also brought in several carloads of live-stock. During the past summer they have had large forces of men building retaining walls along the mountain streams in the canyon between Garcia and Saltillo, so as to prevent washouts. They are now putting the corrugated galvanized-iron roof on their new brick warehouse in their yard in this city. This, when finished, will be the largest railroad warehouse in the republic. It is 77 feet wide by 502 feet long.

The Mexican International Railway Co., put on their line a number of new coal and grain automatic dumping-cars. This road hauls hundreds of tons of coal and coke from their mines at Sabinas, Coahuila, as well as from the States.

At Monterey every industry is running at its full capacity. There are no idle men. There is work for all. The building industry is in evidence in every street in the city. Skilled labor is scarce, and so is building material. Work has been suspended on some buildings for want of stone, brick and lumber. Mr. W. H. Hollingsworth, who has the contract for the building of the Hernandez dry goods store and the Bank of Commerce, has been waiting for lumber for the first building since the first of September. The work on the bank is at a standstill.

About eight years ago a wire-nail factory was established in this city by St. Louis (Mo.) capitalists. Three years ago they sold it out to a party in Shreveport, La. Mr. E. M. Wuerpel was one of the stockholders and an active worker in the concern. After the plant was sold he organized another company and established another plant, and was doing the bulk of the business. This was more than the other party could stand. As they have plenty of money, they bought out the new plant. The transfer was made last week, and the two plants will be run under one management. That transfer will call for another plant. Before the close of the year there will be a new company organized to establish a third plant.

Messrs. Griffith & Steel, contractors on the Coahuila & Pacific Railroad, state that they are pushing construction on that road as rapidly as money and men can do it. Their greatest drawback is the want of labor.

EDMUND LEVAN.

AN EVERY-DAY MARKET.

Purchasing of Iron Has Been General During the Month.

Matthew Addy & Co., of Cincinnati, in their review of the pig-iron market for the week, write as follows:

"The market is marked by a steady and uniform buying that is entirely satisfactory. It is an every-day market, so to speak. The most remarkable characteristic of the purchasing that has been done since the first of the month is its general character. Other buying movements have been marked by much larger single transactions. On the contrary, this buying movement, while there have been few large lots disposed of, has not seen iron go in wholesale blocks. The tremendous tonnage which the furnaces have put upon their order-books during the month has been made up mainly of small lots. It would almost seem as if every consumer in the trade had bought something. Of course, there have been considerable transactions covering delivery over the first half of next year, yet a careful analysis of the orders shows that the majority of the business has been for shorter de-

liveries. From a seller's standpoint nothing could be more satisfactory, for this means that the buyers will necessarily shortly again be in the market. It is a well-known fact that steady and regular buying does much more for the market and is much more satisfactory to all concerned than buying that comes in irregular spurts.

"Since our last report there have been two advances in the price of Southern iron, No. 2 foundry going from \$10.75, Birmingham, to \$11.25, other grades in proportion, and the new prices have not been checked sales. The one great trouble now is getting iron forward fast enough. There is constant complaint regarding slow shipments. As we have said before, the railroads are largely to blame in not being able to supply freight cars enough to meet the emergency. Buyers themselves are not blameless, for they have put off purchasing until the eleventh hour, and are now in many cases demanding that the impossible be done in the matter of getting shipments forward in a hurry."

Alabama Iron in Europe.

A dispatch from Birmingham, Ala., quotes as follows Mr. J. L. Knoepfle, who has returned from a trip to Germany, France, Italy, England, Austria and Holland in the interests of iron and steel-producing companies in the Birmingham district:

"There is no describing the interest I found manifested in Alabama iron and steel on my travels in the foreign markets, and I candidly assert that Alabama has much more ahead of it than the people themselves can see. There were many inquiries as to the capacity of the furnaces and mills in this district. In every country I visited I found that more or less iron and steel from Alabama had been tried and proved successful. It is a pity there are no better transportation facilities. There would be no telling how great the demand would be were the foreigners able to get the product at a cheaper freight rate and more convenient than at present."

INDUSTRY IN GERMANY.

Causes of Stringency in Some Lines of Manufacture.

Discussing the condition of German industries and the crisis in some lines of manufacture, United States Consul John F. Winter at Annaberg writes:

"One year ago the war in South Africa began, which not only put an end to German exports to that part of the world, but cut off the import of gold from the Transvaal at the same time. Money became scarce and the rate of interest high. Germany has several billion dollars invested in foreign countries which is not bringing in the expected returns. German industries during the past few years have been multiplying rapidly. There has always been plenty of money in the country, but the need is now greater than the amount at hand. Many small merchants, shopkeepers, etc., in order to get rich in a hurry, invested their savings in 'wild-cat' enterprises. Government securities have sunk in value, while money for new undertakings can only be obtained at high interest.

"The coal strikes early last spring led to such high prices for fuel that many factories were closed down. The scarcity of coal caused much distress among the poor people last winter, which was an exceptionally severe one. The price of coal today is 25 per cent. more than it was one year ago, and bids fair to go even higher. Inasmuch as one-half of the population of the empire felt the rise in coal at once, they were compelled to cut down expenses

in other things. The effect of this was noted in many industries. Again, the high price of coal increased proportionately the price of production, and this became especially noticeable in foreign countries where German products were compelled to compete with the products of other nations. In addition to this, the present troubles in China do not promise to mend matters.

"The real secret, however, of the present stagnation in many branches of German industries is this: German foreign markets have not increased proportionately with the increase of home production. During the past year German exports to China and South Africa have practically ceased. The empire's exports to the United States, England, the Orient, South America and the Balkan States have been on the increase, but these markets have fallen far short of consuming all that German manufacturers have produced. Then, the most powerful factor with which German industries have had to contend has been the development of independent industries in those countries where Germany has always had her best markets. Especially has this been the case in the United States with all textile-products. For example, the following statement will show how the exports in woolen goods from Greiz to the United States have fallen off: From \$1,008,390 in 1895 to \$48,842 in 1899.

"Without question the competition of the German laborer is not as prosperous as it was a few years ago. The number of idle workmen is increasing, and hard-earned savings must be used. How long present conditions will last remains to be seen."

On the same subject Consul-General Frank H. Mason at Berlin writes:

"Germany is now passing through a period of reflection, self-examination, and a somewhat vague uncertainty as to the future, which involves several points of economic interest to other countries. From about 1891-92 until the summer of the present year the general course of German industries, and especially the foreign commerce of this country, has been one of rapid and substantial expansion and development. In several leading branches of manufacture, electrical and other machinery, shipbuilding and general foreign commerce, this activity is still general and unabated; in others, including textile manufactures, hardware, cutlery, cement and metallic tubing, the limit of profitable production seems to have been reached, if not temporarily overstepped, and this, with the scarcity and high rate of money incident to liberal investments in all sorts of improvements and new enterprises, brought on the relapse which, during the past three months, has caused a general decline in most industrial securities. This decline has not been restricted to any one branch or class of industries, but has affected more or less the stocks of many establishments of the highest financial responsibility, soundly and ably managed, and which are still working overtime on orders that will consume their entire output for several months.

"The question which all thoughtful Germans are now seeking to determine is, how deep-seated and permanent are the causes of the present depression; whether it is, after all, anything more than the natural reaction which inevitably follows a protracted period of intense activity, and whether Germany has at command the resources and conditions which will secure continued prosperity when the temporary stoppage in exports to South Africa and China shall have been relieved by the return of peace and the resumption of normal trade with those countries. In other words, has the bottom been already

reached, and is the slight recovery which has taken place in most leading securities during the past fortnight proof that the danger is really past? On this point there are many opinions, and the discussion now going on in the commercial and technical press reaches down and backward to the ultimate foundations of German prosperity."

Literary Notes.

Moody's Manual of Industrial and Miscellaneous Securities—First Annual Number, 1900. John Moody, Editor. Publisher, the O. C. Lewis Co., New York city.

This volume is the result of the first systematic attempt to publish on a comprehensive scale the data of American industrial securities. It contains not only such information about all the industrial and miscellaneous securities known to the New York market, but an attempt has also been made to include securities of that class dealt with at other important financial centers, and success has been reached with regard to the markets of Boston, Philadelphia, Chicago and several smaller cities. The book contains more than 1100 pages, with statements of nearly 1800 companies, and inclusive of the guaranteed stocks and domestic and foreign government bonds, descriptions of more than 2000 distinct securities. The corporate capital represented therein amounts to more than \$9,325,000,000, exclusive of that contained in the sections on government securities and guaranteed railroad stocks. The author calls attention to the increasing tendency of industrial enterprises toward consolidation, and as an indication of the natural trend of affairs presents tables which show that whereas the capitalization of companies dealing with electric-power, compressed air, etc., with manufacturing of iron, steel and allied industries and with miscellaneous manufacturing incorporated prior to January 1, 1898, was \$811,161,300, the capitalization of all companies in these lines incorporated since January 1, 1898, is \$5,059,309,911. These figures do not cover all the companies in the book, but merely show the growth of capital represented in these manufacturing lines during the past few years. The conception of the volume has been ably carried out, and will be of valuable assistance to investors and others interested in the financial and industrial development of the country.

The Christmas Ladies' Home Journal offers a superabundance of literary and artistic features in most attractive form. Among its nearly twoscore contributors are Mrs. Lew Wallace, Elizabeth Stuart Phelps, Charles Major, William Perrine, Clifford Howard and Elizabeth Lincoln Gould, while A. B. Frost, W. L. Taylor, Reginald B. Birch, Henry Hutt, George Gibbs and many other illustrators supply its pictorial features. Apart from the articles having special holiday timeliness of interest, the notable features of the Christmas Journal include "The Inn-keeper's Daughter Who Dissolved a President's Cabinet," "What May Happen in the Next Hundred Years," "Jerusalem as We See It Today," "Two Women's Gifts of Twenty-Five Millions," "The Little Men' Play," a dramatization of Louisa M. Alcott's delightful story, "Where Children See Saint Nick," "The Fourteenth Man," "Two Christmas Days at Rock Farm," and "The Successors of Mary the First," "The Story of a Young Man" and "The Blue River Bear Stories," which are continued. Edward Bok has a thoughtful article on Christmas celebrations, and there are various articles on women's wear, Christmas presents and edibles, while various other

practical, helpful themes are ably presented.

The Engineering Magazine for December opens with an editorial review of the Anglo-German agreement, pointing out its extreme industrial significance and its complete accord with the principles and solutions declared by Captain Mahan, Hon. John Barrett, Minister Denby, Gen. Wm. Barclay Parsons, Prof. E. P. Allen, Mr. John Foord and other writers in the Magazine during the past three years. The event is significant of the establishment of the era of beneficence in dealing with alien peoples—the forerunner of an epoch of world-peace and industrial activity—the direct outcome of the recognized influence of the engineer and the industrial leader in international affairs. Mr. B. H. Thwaite has a comprehensive and remarkably finely-illustrated review of the types of water-tube boilers applied to naval vessels. Excellent pictures accompany also Mr. Starling's study of the control of the Yellow river of China, Mr. Perkins' article on English central-station practice, and the very interesting presentation, by Mr. H. Mortimer Lamb, of the iron-ore resources of British Columbia. The immediate probability of the founding of large enterprises on Puget Sound, developing the mineral wealth of the region in the service of the growing Oriental trade, lends special significance to this theme.

The world has never known a more dramatic situation than that presented by the foreign community within the walls of Peking while cut off from communication with their countrymen. During these long doubtful weeks the most interesting figure in this international tragedy was Sir Robert Hart, who for more than twenty-five years has been as far as a European might the statesman guiding the affairs of the Chinese empire. Those familiar in any degree with Eastern conditions hoped, after the relief of Peking, that Sir Robert would break his long rule of silence and give to the world his story of the events which led to the closing of the gates of the British legation, and his views as to the policies which should prevail in the settlement of the difficult questions which had arisen. He has selected the *Cosmopolitan* as his medium, and his paper will appear in the December issue.

How to Succeed. By Austin Bierbower. Publishers, R. F. Fenno & Co., New York. Price \$1.

This book will be read with profit by every young man. The titles of its twenty-seven chapters indicate clearly its trend. Know what you want, get the most out of life, don't be a fool, don't be a beast, get ready, start, keep at it, keep in good condition, hunt hard work, find where your greatest power is, make up for lack of capacity, help yourselves with others, don't be favored, give an equivalent, be wanted, be relied on, keep prepared for truth, live in your own times, be ready for opportunities, don't repeat failures, and look far enough ahead are in themselves suggestions, practical and to the point. They head chapters equally practical and at times epigrammatic in their style.

Seven Smiles and a Few Fibs. By Thomas J. Vivian. Publishers, R. F. Fenno & Co., New York. Price \$1.25. Here is a series of crisp-told tales reflecting life on the Pacific coast and manifestations of the various phases of humanity coming to the surface in one way or another at San Francisco. Some of the contents are mere character sketches of a humorous turn, while others have the spice of adventure about them.

FOREIGN TRADE.

This department is designed to set forth opportunities for the extension of the trade abroad of American manufacturers, and to record facts about the rapidly-developing commerce of the South.

AMERICAN FOREIGN TRADE.

Figures Showing Changes and Expansion of a Century.

Figures presented by the bureau of statistics of the Treasury Department give an interesting survey of the expansion of American trade and the changes in its character since the formation of the government. In the period between 1790 and 1800 the value of imports was \$614,845,454, and of the exports \$487,947,512, an excess in favor of imports of \$126,897,492. This excess, as studied by decades, continued with slight interruption between 1840 and 1850, until the ten years beginning with 1871, when the excess of exports was \$540,792,075. In the next ten years this excess was \$729,489,759, and between 1891 and 1900 it was \$2,615,343,320. The advance in exports of the past ten or fifteen years continues, according to the figures for the past ten months of this year. Our exports show an increase of \$166,331,178 in the ten months ending with October, 1900, as compared with the corresponding ten months of 1899, and the total for the ten months is practically double what it was in the corresponding months of 1894. This of itself shows a remarkable activity in all lines of production, while the import as well as the export figures indicate that the activity in manufacturing lines, and consequently the increased earnings of the millions engaged in these industries, must be very great. A very considerable share of the materials required for use in manufacturing comes from abroad, such, for instance, as India rubber, tin for use in manufacturing tinplate, hemp, jute, sisal, raw silk, cabinet and dye woods, chemicals, hides and skins and certain grades of wool and cotton, and by measuring the growth in the importation of these articles some idea of the growth in manufacturing may be obtained.

The total importation of materials of this class used in manufacturing during the ten months ending with October, 1900, is \$238,257,918, as compared with \$214,396,757 in the corresponding months of 1899, and \$127,301,945 in the same months of 1894. Turning again to the export side, it is found that the exportation of manufactures alone amount in the nine months ending with September, 1900, to \$338,678,243, against \$277,502,649 in the corresponding months of 1899, and \$145,793,834 in the same months of 1895. Thus the exportation of manufactures has increased nearly 25 per cent. in one year, and more than doubled in the four years from 1896 to 1900, while the importation of manufacturers' materials has also increased at a very rapid rate. Exports of manufactures of iron and steel alone amount to \$110,000,000 in round numbers in the ten months ending with October, 1900, against \$86,000,000 in the corresponding months of 1899 and \$51,000,000 in the corresponding months of 1897, thus having more than doubled in the three years from 1897 to 1900.

Not only have the manufacturer and the millions dependent upon this industry shared in the prosperity of the year, but those engaged in agriculture and mining seem to have been equally prosperous, judging from the record shown by the figures of our export commerce. The exportation of agricultural products in the ten months ending with October, 1900, is, in round terms, \$700,000,000, as against \$625,000,000 in the same months of 1899,

while the products of the mine, the forest and the fisheries also show an increase in 1900 as compared with the figures of 1899.

Galveston Harbor Improvements.

The latest reports from Galveston, Texas, indicate that the government has taken prompt action relative to the harbor improvement. Capt. C. S. Riche, engineer at Galveston, has forwarded a report recommending the enlargement of the channel on the ground that the constantly-increasing bulk of foreign trade demands such an expenditure. It is proposed to maintain a channel 200 feet in width between Pelican Island and the island on which the city is located. This will considerably extend the harbor lines beyond their present boundary.

Baltimore to London.

The steamship Michigan of the Atlantic Transport Line has been placed on the route between Baltimore and London. It is the largest vessel in the fleet of this company which has ever entered Baltimore harbor. The Michigan is a twin-screw ship of 8000 tons gross register. She is 490 feet long, 56 feet beam and 38 feet in depth, having a capacity for 11,000 tons of cargo, in addition to accommodations for live-stock. The ship is also equipped for carrying 100 passengers.

Iron and Steel for Many Ports.

As a further indication of the extent of iron and steel exports, a cargo of steel plates was recently shipped by way of Philadelphia for Glasgow and Greenock, Scotland, which was valued at \$135,000. A recent shipment from Baltimore included 520 tons of plates and 350 tons of wire, billets, iron pipe and trolley poles. Recent exports of iron and steel from New York were made to Wales, Scotland, South America, China, Japan, India, Norway, England, Italy and Australia.

Large Ships for Baltimore.

It is stated that two steamships, being constructed by the North German Lloyd Company, are to be placed upon a line between Baltimore and German ports. They will be 535 feet in length, 58 feet beam and 37 feet in depth, with a capacity for 12,000 tons of cargo and 1500 cabin and steerage passengers.

To Build Another Pier.

It is announced that the Chesapeake & Ohio Railroad Co. has officially decided to construct an additional pier at Newport News on the water-front property which it recently secured. With the new pier the company will have ten in all for the loading of coal, grain and miscellaneous freight.

Notes.

A steamship recently cleared from Baltimore for Rotterdam with 316,000 bushels of grain and oats, representing about 400 carloads.

It is announced that the recent order for 450,000 tons of Pennsylvania coal for export, referred to in the Manufacturers' Record, is for consumption in France. It will be delivered on board vessels at Baltimore.

Among last week's exports from Newpor. News, Va., were 62,097 barrels of flour, 42,850 bushels of corn, 16,000 bushels of wheat, 100,000 bushels of oats, 897,147 pounds of lard and 101,685 pounds of tallow.

Mr. F. S. Cock of Christiania, Sweden, who is engaged in the sale of engineering supplies, writes to the Manufacturers' Record seeking information concerning anything new in those lines worth taking up for sale abroad.

The steamship *Alnwick* has been chartered to carry 3500 tons of steel plates to Fremantle, Australia. The cargo comes from the Carnegie Steel Co., and will be exported by way of Baltimore. It represents 200 carloads.

Ernesto M. Hernandez of Merida, Yucatan, Mexico, writes to the Manufacturers' Record that he is interested in all kinds of American products, especially manufactures of iron and other metals, windmills, safes and sample goods.

Two new vessels are being constructed for the Chesapeake & Ohio Steamship Co. at West Hartlepool, England. They are named the *Alleghany* and *Powhatan*, and have a cargo capacity of 7000 tons each. They will be placed in commission about January 1.

G. H. Adams & Co. of Melbourne write to the Manufacturers' Record seeking information about American manufacturers of paper, flat and on reels, suitable for Hoe printing press; boots and shoes, cotton goods, hosiery and kindred manufactures. The firm has been dealing in such goods for twenty years.

The transportation of horses from Texas, Missouri, Indian Territory and other points in the South and Southwest through New Orleans for the British army in South Africa has been resumed. One transport sailed last week with 1200 horses, and three more transports are shortly expected at New Orleans.

In a letter to the Manufacturers' Record C. L. Kounsell of Agra, India, desires price-lists, catalogues and other information concerning ice machines producing one cut of ice or more at a time and worked by hand or electric power, model electric engines, electric fans and bolts, cottonseed crushers, electric lamps and tobacco-cutting machines.

Chinese Mother Goose Rhymes. Translated and illustrated by Isaac Taylor Headland of Pekin University. Publisher, Fleming H. Revell, Chicago, New York and Toronto. Price \$1.25.

China is such an old country that the thought of anything being young there comes as a shock. The thought, as given by Professor Headland in his volume, produces, however, a shock of pleasure. The translator believes that there are more nursery rhymes in China than can be found in England and America. He has collected in two out of the eighteen provinces of China more than 600 alone, and has translated them upon the plan of reproducing the original idea as nearly as possible, and has embodied more than 150 of them in the present volume, each rhyme having its Chinese original and an attractive illustration from photographs. The rhymes have features similar to the familiar Mother Goose of English children, and refer intimately to insects, animals, birds, grown persons, children, food, parts of the body, actions, such as patting, grabbing, tickling, professions, trade and business. Professor Headland's judgment is that there is no language in the world containing children's songs expressive of more sentiment and tender affection than the rhymes. "Sweeter Than Sugar," "Sweet Pill," "Little Fat Boy" and "Baby Is Sleeping," and he has prepared the rhymes in the hope of presenting a new phase of Chinese home life and leading the children of the West to have a measure of sympathy and affection for the children of the East. His hope ought to be fulfilled. He has certainly produced a volume which even without the spur of special interest at this time in other Chinese matters will be attractive to thousands of American children and even to those who have passed to man's estate without losing interest in childhood.

RAILROADS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

ILLINOIS CENTRAL PLANS.

Nearly 100 Miles of New Line to Be Built in Louisiana, and Another Elevator at New Orleans.

A meeting of the stockholders of the Illinois Central Railroad Co. will be held in Chicago on January 26 to consider an increase in the capital stock from \$60,000,000 to \$66,000,000. It is announced that the increase is intended for additional equipment, also improvements and extensions to the system.

The Manufacturers' Record learns on good authority that the Illinois Central has planned a considerable mileage in the South in addition to that which is at present in operation. A survey has recently been completed between Baton Rouge, La., and Nicholson, Miss., through Southern Louisiana, which is admitted to be in the interest of the Illinois Central. The new line would connect with the main system at Nicholson, and will be ninety miles in length. The route is east and west through the southern portion of Louisiana, and when built it will prove a very valuable feeder. It is stated that bids have already been received for the section between Baton Rouge and Hammond, La., a distance of forty-four miles.

In addition to this extension, it is proposed to double-track another portion of the main line to the extent of eighty miles.

Another important improvement will be the construction of an additional elevator at New Orleans, with a capacity of at least 1,000,000 bushels. It is understood that it will be located at the Stuyvesant docks. Although the docks were recently completed and have very large storage and transfer facilities, the increase in export traffic of the Illinois Central requires another elevator.

Progress of the Great Eastern.

The Manufacturers' Record has received further details of the Great Eastern Railroad, recently referred to in a letter from Mr. J. H. Macleary, one of the directors of the company. Mr. Macleary writes as follows:

"C. E. Coon, the contractor, is now working his entire force of 150 mules and 200 men between Snow Hill and Fremont. The engineers started survey on the 18th inst. from Fremont to Raleigh, N. C. As soon as the line is located Mr. Coon will put a large force at work at once grading between Fremont and Raleigh. The completion of same will be vigorously pushed. Tracklaying will start at Fremont in thirty days and be continued to Snow Hill; thence from Fremont and follow the grade to Raleigh. At the same time the construction will continue from Snow Hill to Pamlico, where connection will be made with the Norfolk & Southern Railroad. The road will then continue to Englehardt, on Pamlico Sound, where deep-water connection is made with all Eastern points. Northern points are reached via Norfolk & Southern and N. Y., P. & N., all Southern and Western points via Seaboard Air Line at Raleigh. The route traverses a very fertile country. The entire length of line is about 160 miles. It is expected to complete the road in two years."

Sale of a West Virginia Line.

According to a dispatch from Parkersburg, W. Va., a large tract of coal land in Braxton, Gilmore and Lewis counties, West Virginia, has been purchased by New York and Pennsylvania parties, who have also secured control of the Little

Kanawha Railroad, extending from Parkersburg to Palestine, W. Va., a distance of thirty miles. It is announced that the newcomers will probably extend the line to Burnsville, about 100 miles' distant from Parkersburg, as originally intended, in order to develop the coal lands adjacent to the right of way. H. C. Jackson continues as president of the company, while B. E. Cartwright of Ridgway, Pa., has been elected vice-president and general manager.

Prominent Mexicans Interested.

Don Alfredo Barron, a prominent Mexican official, who is located in Washington in the consular service, has recently returned from the City of Mexico. In referring to the Kansas City, Mexico & Orient Railway, being promoted by Mr. A. E. Stilwell, he said in an interview:

"I am not financially interested in the road, but my friends are, and I am in a position to know the plans of the promoters. The best people of Mexico are interested in the road, and they are in position to get from the government any concession they may desire for the road. The men in the United States who are backing the company are men who have the reputation for doing what they undertake."

Dallas to Fort Worth.

Another company has been formed to build the proposed electric line between Dallas and Fort Worth, Texas, under the title of the Dallas, Fort Worth & Southern Railway Co. Messrs. George T. Bishop and John Sherwin of Cleveland, Ohio, who represent the company, write the Manufacturers' Record that the line between the cities will be thirty-two miles in length. In addition the company owns the City Railway and the Fort Worth Street Railway, comprising nineteen and one-half miles of track. The company contemplates an extension beyond Fort Worth, but calculates to build the section between the cities within the next six months.

A Chesapeake & Ohio Report.

A report is current that the Chesapeake & Ohio Railway Co. has secured a controlling interest in the Potomac, Fredericksburg & Piedmont Railroad. The Piedmont road is a narrow-gauge line extending from Fredericksburg to Orange, Va., a distance of thirty-eight miles. At Orange a connection is made with the Chesapeake & Ohio. By changing the line to standard gauge and extending it a distance of twelve miles the Chesapeake & Ohio would reach navigable water on the Potomac river, and in connection it is stated that the Chesapeake & Ohio may utilize this to transport coal to the Potomac, where it will be loaded on vessels.

More Rolling Stock Needed.

Mr. B. L. Winchell of the Kansas City, Fort Scott & Memphis Railroad Co. has recently been making an inspection of the line. While in Memphis Mr. Winchell stated that the company has recently purchased rolling stock for two passenger trains from the Pullman Company, and will place them in operation by January 1. The company has also ordered 600 coal cars to be delivered as soon as possible.

Railroad Notes.

The Savannah & Statesboro Railroad Co. has elected Stilson Hutchins of Washington, president; Lee Hutchins, vice-president and general manager, and F. Wright, general superintendent.

Another company may be formed to operate a steamboat line between Macon and Brunswick, Ga. It is stated that the

Garbutt brothers of Louisville, Ky., who own several boats, are interested in the plan.

At the annual meeting of the stockholders of the Charleston & Western Carolina division of the Atlantic Coast Line the present officers were re-elected. James B. Cleveland is president, and Harry Walters, vice-president.

The Merchants & Farmers' Steamboat Co. of Wilmington, N. C., has given a contract for an additional steamer, which will be 111 feet in length and used upon the rivers of North Carolina. It is being constructed in Wilmington.

President Francis L. Gowen of the Choctaw, Oklahoma & Gulf Railroad Co. in a recent interview stated that the proposed extension from Hartshorne to Ardmore, I. T., will probably be built. It will be 116 miles in length.

According to a dispatch from Greenville, Miss., the Southern Railway Co. expects to increase its coal shipments to the lower Mississippi market next year. A number of large contracts have recently been made with New Orleans consumers.

According to a dispatch from Wheeling, W. Va., a plan is under way to consolidate the various street railway companies operating in the city and suburbs. A company has been incorporated in West Virginia for this purpose, which includes F. A. Henry and A. M. Snyder of Cleveland, Ohio.

A dispatch from Savannah, Ga., is to the effect that the Philadelphia & Savannah Line recently inaugurated by the Merchants & Miners' Transportation Co. will in future comprise three vessels, which will give a schedule of two sailings a week from each city. At present a weekly schedule is enforced.

In a letter to the Manufacturers' Record Mr. J. H. Hicks of Clarkesville, Ga., writes that a company has been organized to construct an electric railroad between Clarkesville and Naoochee. Mr. Hicks states that the company has received considerable encouragement, and that several industries will be located at Clarkesville within the next few months.

A dispatch from Clarksburg, W. Va., states that the West Virginia Short Line Railroad, which has just been completed between Clarksburg and New Martinsville, W. Va., a distance of forty-five miles, will be a feeder of the Pennsylvania Railroad and be operated in harmony with this system. It traverses an extensive coal territory, and would create a large amount of local freight traffic.

The National Hardware Association, in session at Richmond, Va., elected for the year John Bindley, Pittsburg, president; B. W. Shapleigh, St. Louis, Bruce Hayden, San Francisco, vice-presidents; T. James Fernley, Philadelphia, secretary; J. D. Moore, Birmingham, Ala., and Samuel L. Biglow, Boston, Mass., members of the executive committee for three years.

General Passenger Agent E. J. Martin of the San Antonio & Aransas Pass Railway has interested himself in securing for the Business Men's Club of San Antonio a permanent exhibit of the resources of the section of Texas traversed by the railroad.

The Virginia State board of fisheries has turned into the State treasury during the year, clear of expenses, \$70,000.

The Business Men's League and the Chamber of Commerce of Atlanta, Ga., have consolidated.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

Fine Damask Mill Announced.

It was reported in October that Gustavus Millhiser of Richmond, Va., intended to build a damask mill at Roanoke Rapids, N. C. It is now announced that arrangements have been completed for locating the enterprise, and contracts for erection of the necessary buildings have been placed. The main building will be two stories high, 106x320 feet, and in it will be installed textile machinery for the production of the finest grades of cotton damask. From 300 to 400 operatives will be employed. Water-power will be used. The Putnam Textile Co. has been incorporated to conduct this enterprise, the incorporators being Messrs. Gustavus Millhiser of Richmond, Va., and S. L. Patterson of Roanoke Rapids, N. C.

Another Mill at Charlotte.

Arrangements have been perfected for the establishment of another cotton factory at Charlotte, N. C. The required capital of \$200,000 has been subscribed, and incorporation papers are being prepared now. Company's title has not been stated yet. W. B. Smith Whaley of Columbia, S. C., will furnish the plans and specifications for the plant. The textile machinery, which has been ordered from the manufacturers, will include 10,000 spindles and 100 looms. Contract for erecting the buildings will be awarded this month. The stockholders will be Messrs. E. A. Smith and J. P. Wilson of Charlotte and three others. Mr. Smith will be president.

The Cotton Movement.

In his report for November 23 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that during the eighty-four days of the present season the amount of cotton brought into sight was 4,371,727 bales, an increase over the same period last season of 214,975 bales; exports were 2,152,626 bales, an increase of 390,004 bales; takings by Northern spinners 596,044 bales, a decrease of 214,235 bales; by Southern spinners 390,617 bales, a decrease of 14,290 bales.

Textile Notes.

Geo. C. Smith of Milledgeville, Ga., asks for information regarding cotton-mill machinery.

The B. L. Battle Manufacturing Co. of Warrenton, Ga., has completed its \$25,000 knitting mill and is about to commence production.

The Knoxville (Tenn.) Knitting Mills has added eighteen new machines, increasing its production by about 25,000 dozen pairs of hose yearly.

Messrs. J. M. McBride, C. B. Hitchcock, W. W. Summerlin, J. C. Tumlin and others of Tallapoosa, Ga., are organizing a \$50,000 cotton-mill company.

The National Trust Co. of Washington, D. C., states that it is its intention to locate a large knitting mill at Portsmouth, Va., as has been reported recently, but details have not been arranged yet.

It is stated that the National Trust Co. of Washington, D. C., has arranged for

the location of a knitting mill on its property, near Portsmouth, Va., the plant to employ 300 hands and produce hosiery.

A meeting of those interested in the formation of a cotton-mill company at Fort Worth, Texas, last week resulted in subscriptions for about \$50,000. Those interested are Messrs. W. J. Boaz, J. A. Smith, J. J. Jarvis, Geo. E. Bennett, J. W. Spencer and others.

Application for charter has been made for the Inman (S. C.) Cotton Mills, capitalized at \$200,000. The incorporators are Messrs. R. H. F. Chapman of Inman, S. C.; A. H. Twichell of Spartanburg, S. C.; T. C. Duncan of Union, S. C.; J. R. Gibson of Inman and J. A. Chapman of Spartanburg.

The Messrs. Lewis, reported last week as having purchased the McDonald Cotton Mills at Sylacauga, Ala., will at once equip with the necessary textile machinery this uncompleted mill. The spindles will number 10,000, and the power plant can turn 20,000 spindles when necessary to double the plant. The mill is expected to commence producing hosiery yarns within ninety days. D. L. Lewis has been elected president, and John T. H. Lewis, secretary-treasurer.

Chas. J. Austin, manager of the Tifton (Ga.) Knitting Mills, the latter reported several weeks ago, states that the twenty-five knitters and other complementary machinery has been ordered and will be in place before February 1. The production will be ladies' plain cotton hose. The company will at first install a dyeing plant, and is desirous of corresponding with a home firm for this operation to its goods. It also wants to contract for mule-spun hosiery yarns in numbers 1-14 and 1-15. The enterprise will represent an investment of \$10,000.

Southern Engineers.

At the annual meeting of the Engineering Association of the South the following officers were elected: President, Major Niles Meriwether, Memphis, Tenn.; vice-president, W. H. Schuerman, Nashville; secretary and treasurer, H. M. Jones, Nashville; directors, James D. Geddes, E. C. Lewis, R. T. Creighton, G. F. Blackie, Mt. Pleasant, Tenn.; G. D. Fitzhugh, Birmingham, Ala.; E. E. Betts, Chattanooga, and C. S. Brown, Nashville. The association now has more than 100 members, and finances are in a healthy condition. The constitution was amended so as to permit engineers in various localities to establish local sections of the association.

Building Steel Vessels.

According to reports made to the United States Commissioner of Navigation by twenty-three builders in the United States of steel steam vessels there were on August 15 last sixty-eight merchant steam vessels, aggregating 278,000 tons, and forty-seven naval vessels, aggregating 113,000 tons, building or under contract. Since then contracts have been let for merchant vessels aggregating 72,000 tons, and there are naval vessels aggregating 179,800 tons yet contracted for.

The committee on rivers and harbors of the House of Representatives has made a special investigation of the Coosa river in Alabama, with a view to placing the work of removing obstructions from it upon a continuous contract plan.

The sales in the Joplin (Mo.) district during the week ended November 24 amounted to 10,263,811 pounds of zinc ore and 1,522,790 pounds of lead ore, valued in all at \$161,342.

COTTONSEED OIL.

This department is open to the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

EXPORTS OF COTTONSEED.

Review of the Industry in the Government Crop Report.

In the government crop report for November an estimate of the production of cottonseed in the United States for each of the past ten years, based on the number of bales (500 pounds) of cotton produced, i. e., one ton of seed to every two bales of lint, is given in the following statement:

Years.	Cottonseed.
	Bales. Tons.
1890	8,652,597 4,326,298
1891	9,035,379 4,517,689
1892	6,700,365 3,350,182
1893	7,549,817 3,774,908
1894	9,901,251 4,950,265
1895	7,161,094 3,580,547
1896	8,532,705 4,266,352
1897	10,897,857 5,448,928
1898	11,189,205 5,594,602
1899	78,900,000 4,450,000

*Preliminary estimate.

The manufactured products upon which the value of cottonseed chiefly depends are cottonseed oil, cottonseed oilcake and oilcake meal. The yield of these products to the ton of seed (2000 pounds) is subject to variations, but a fair estimate would be about thirty-seven gallons of oil (275 pounds) and 725 pounds of oilcake or oilcake meal. The residue, 1000 pounds in each ton, consists of linters and hulls of comparatively small commercial value. The quantity of cottonseed that could be utilized for manufacturing purposes, in case the industrial demand were equal to the supply, naturally varies from year to year, but it is considered a fair estimate that of late years about 65 per cent. of the total crop could have been made available for industrial (and fertilizing) uses, the remaining 35 per cent. being required upon the plantations for planting. It is scarcely necessary to state, however, that the total of this available surplus has never yet been utilized in manufacture.

After reference to the earlier uses of the seed, the report continues:

"In the crop year 1871-72, according to commercial estimates, only 4 per cent. of the total cottonseed crop of the United States was utilized for manufacture; in 1881-82 the proportion had increased to about 12 per cent.; in 1891-92 it had attained approximately to 25 per cent., and in 1898-99, when the percentage manufactured had reached maximum up to the present date, the quantity used for industrial purposes was estimated to be 43 per cent. of the entire crop. The status of the industry in the crop year 1898-99 would, therefore, seem to indicate that about 78 per cent. of the cottonseed crop was utilized for seedling and industrial purposes combined, leaving approximately 22 per cent. for use as a fertilizer or to go to waste. In the crop year 1899-1900 the percentage used in manufacture showed, as might now be expected in a short crop year, a slight decrease from the preceding one.

"In the current year, however, owing to the prevailing high prices of cottonseed, it would seem reasonable to expect a considerable lessening of the difference between the available supply and the industrial demand.

"In the fiscal year 1871-72, when the growing importance of the exports of cottonseed oil first warranted a separate, specific statement in custom-house accounts, the quantity exported amounted to only 547,165 gallons, valued at \$293,546. In 1899-1900, less than three decades later, the exports had increased to

46,902,390 gallons, with a value of \$14,127,338. The following statement illustrates the growth of the export trade in cottonseed oil since 1880:

Years ended June 30—	Gallons.	Value.
1880	6,997,796	\$2,225,414
1881	13,384,285	5,291,178
1882	11,003,160	3,975,306
1883	13,859,278	4,982,235
1884	9,462,074	3,927,556
1885	14,058,209	6,008,405
1886	21,187,728	6,813,313
1887	19,445,848	5,476,510
1888	27,198,882	6,597,361
1889	40,230,784	10,167,619
1890	50,627,219	12,077,519
1891	46,902,390	14,127,338

"The exports of the last two years represent, respectively, about 55 per cent. and 65 per cent. of the total quantity of cottonseed oil manufactured in the United States during the corresponding periods, the remainder having been reserved for domestic consumption.

"The exports of cottonseed oilcake and oilcake meal were not separated in the official statements of the Treasury Department from the exports of linseed oilcake and oilcake meal until 1895. The following statement gives the exports and values since that date:

Years ended June 30—	Pounds.	Value.
1895	489,716,653	\$4,310,128
1896	404,357,291	3,740,232
1897	623,386,638	5,515,809
1898	919,727,701	8,040,710
1899	1,079,393,479	9,253,386
1900	1,143,704,342	11,229,188

"For cottonseed in its natural state the export demand, though unimportant, has shown a steady increase during the past six years, as is shown by the following statement:

Years ended June 30—	Pounds.	Value.
1885	11,051,812	\$86,895
1886	26,980,110	179,621
1887	26,566,024	170,694
1888	32,764,781	197,258
1889	34,443,806	197,023
1900	49,855,238	346,290

"Over \$25,500,000 was realized in the fiscal year ended June 30, 1900, from the exports alone of what, a little more than thirty years ago, was considered a commercially valueless product of the Southern cotton fields. An amount considerably over half of this sum may be added for the total value of the manufactured products that entered into domestic consumption."

Uses for Cotton Oil.

Among the various avenues of the cottonseed industry attention has been called to the utility of furnishing an oil for textile purposes equal to the olive oil of Italy. The New York Commercial, in referring to a recently-incorporated company in Providence, R. I., which is to supply refined olive oil from Italy to textile mills in this country, says:

"It was noted the other day that some portion of our cottonseed returns to us from Europe in the form of a good quality of olive oil, and the query arises why we should not produce in this country, instead of importing from Italy, the oil which is used as the basis of the soaps of low acidity required by our textile manufacturers in treating fabrics the colors in which would be injured by ordinary soaps.

"If this question has not been seriously considered, it should be speedily taken up by those interested in the subject, and whatever good there is in it should be sifted out for the benefit of American capital and labor. It is not necessary to call the attention of hard-headed business men to the unpardonable wastefulness and slovenliness of our letting any portion of our cottonseed production remain utilized and importing from a distant country—with all the expense and loss of home enterprise which that implies—a product that we could elaborate ourselves from what is now a total loss to the Southern industry.

"True, a great use is now being made of cottonseed; but that is no reason why its use should not be extended until the

last kernel of it is converted into a profit to some honest American pocket."

Cottonseed-Oil Notes.

The Belgium steamer Iris cleared last week from Savannah, Ga., with 2500 barrels of cottonseed oil for Antwerp among her cargo.

The Calhoun Cottonseed Oil Mill at Piedmont, Ala., which shut down a week or ten days ago for repairs, has started up again, and is now running on full time.

The foreign shipments of cottonseed products to Europe from Galveston, Texas, during the past week amounted to 22,088 sacks of cottonseed meal to Antwerp, 4592 barrels of cottonseed oil, 81,497 sacks of cottonseed meal and 1902 sacks of cottonseed cake.

The exports of cottonseed oil from the United States for the year ending June 30, 1900, aggregated 46,902,390 gallons, valued at \$14,127,538. The exports of cottonseed meal and cake for the same period amounted to 1,143,704,342 pounds, valued at \$11,229,188, and exports of cottonseed 49,855,238 pounds, valued at \$346,230.

The National Paper Co., an outgrowth of the Thomas Fiber Co., recently incorporated, is about to establish a new industry in the South, that of manufacturing cottonseed hulls into paper of different grades. It is stated that the company owns the Thomas patents for making paper by a new process, and is possessed of abundant capital. Negotiations are now in progress for mill sites at Memphis, Tenn., Fort Smith, Ark., Galveston, Texas, Baton Rouge, La., and Harrison, Texas. Atlanta will have one of the largest of these mills, and will be made the headquarters of this industry. The future of this enterprise in the South will be watched with much interest.

A called meeting of the Cottonseed Crushers' Association was held at Dallas, Texas, on the 20th inst. All sections of the State were represented. Vice-President W. D. Keyser of Marlin presided, in the absence of the president, Marion Sansom of Alvarado. Delegates were appointed to convention at Fort Worth in behalf of the port of Galveston. A discussion as to the crop conditions was entered into, in which a number of members took part. It was stated that out of 140 mills in Texas, eighty-five are now members of the association, with good prospects for a considerable increase. Of fifteen mills in Oklahoma and Indian Territory, seven belong to the association.

To Build Up Towns.

The Manufacturers' Record, published in Baltimore, is full of good things this week. Its columns are teeming with industrial movements. Prospectors in all manufacturing look to this journal for locations. Many a small town has been largely enriched through its valuable aid. Every merchant in the city as well as manufacturer should keep it on his desk.—*Buena Vista (Va.) Advocate.*

A committee appointed by the Merchants' Association of Wilmington, N. C., to consider the projects for an anchorage basin at the port and for the improvement of the upper Cape Fear river by the general government has presented a report setting forth in detail the practical reasons for the improvements. The committee argues that they would result in increase of tonnage on lines now represented, the establishment of new industries and the promotion of better mail and passenger accommodations.

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

LUMBER MARKET REVIEWS.

Baltimore.

Office Manufacturers' Record,
Baltimore, Md., November 28.

The week under review has been a moderately active one in certain lines of the local lumber industry, but the total volume of trade is light. Manufacturers and commission men report a fair trade with local dealers, and the demand from out of town is moderate. In North Carolina pine the situation is satisfactory, and the demand steady, with prices firmer as a rule. The inquiry for Georgia pine is better, and the market firm. Cypress is in limited demand, with stocks ample for all present wants. The hardwood market is improving, and the demand from nearby towns is better, with the list of values steady. The foreign export trade is light, European advices being to some extent unfavorable, and buyers holding off, with values easy. The London Timber Trades Journal, in its issue of November 17, says: "Prices here are not nearly so assured as they were even a couple of months ago, and in London the peculiar position of stocks has a bearing influence on almost all descriptions of sawn wood. At each succeeding auction this slackening off in the demand becomes more pronounced, and on batten sizes and the commoner class of deals very little hope of a rally in prices are entertained. The mahogany and hardwood market continues to exhibit the weakness that was partially shown at the last sales, which is now more fully confirmed, the minimum price having definitely fallen one point. At the public sales there was a moderate attendance, the demand having slowed down considerably. The bidding for prime and sizeable wood was fairly steady, but small and indifferent was generally neglected and passed, brokers holding it firmly at their valuation, and refusing to force sales by further concession."

Pensacola

[From our own Correspondent]
Pensacola, Fla., November 26.

There has been a fairly active movement in the lumber and timber market during the past week; a number of steamers and sail vessels are loading, but the total volume of trade in wood products has shown very little expansion. The sawn-timber trade is very quiet, with prices about steady at 13 to 13½ cents per cubic foot, with very little demand at these figures. Stocks of timber are more than ample for present wants, and it has been suggested that if manufacturers would lessen the output the market would show a material recovery in a short time. In lumber the situation is more satisfactory, and there is good inquiry for all desirable grades. At all milling sections adjacent to this port there is decided activity among mills, and orders continue to be received mostly for prompt and near future shipment. The demand from European ports for lumber seems to be on the increase, especially from continental ports. From South and Central America and Cuba there is also a good inquiry, while prices continue very steady, with holders showing a disposition to retain stocks rather than lower the price-list. Ocean and coastwise freights are easier, while the offering of desirable tonnage is moderate. Pensacola is now passing through a remarkable era of development, both commercial and industrial, and the improvements in wharf facilities, in docks and

harbor generally all insure a quick dispatch in loading vessels. Pensacola bay is to be connected by an inland water route with Perdido. The route will be through the Grand Lagoon to its head, and thence through a canal across the narrow neck of land to Perdido bay. On the completion of that work a waterway will be opened for lumber companies, affording them better facilities for bringing their logs and timber to the mills. The Southern States Land & Lumber Co. and the Brent Lumber Co. jointly have employed engineers to make an estimate on the cost of dredging a channel to give an inland route between the two harbors. One of the most important improvements is about to be commenced by the Louisville & Nashville Railroad Co., that of dredging around the new Commandancia wharf, the contract for which has just been awarded to a Northern contractor.

A depth of thirty feet will be dredged on both sides of the wharves, and the slip between the wharves will also be dredged. When completed six of the largest steamships can load at one time. An appropriation of \$100,000 is promised the navy-yard to establish there a torpedo-boat and storage plant. The plan is to put in a drawbridge where the tracks of the Pensacola Terminal road crosses Bayou Grande, and to dredge a channel up the bayou to Commodore's pond, a body of fresh water near the navy-yard, which will make an ideal location for the storage of torpedo-boats. The arms and equipment will be stored in the buildings at the yard.

Savannah.

[From our own Correspondent]
Savannah, Ga., November 26.

The general lumber trade of this and adjacent Georgia ports continues to show improvement over conditions existing sixty days ago. The demand from Northern ports is steady, but not urgent, and while manufacturers do not expect unusual activity, a substantial business is indicated during the coming winter. There is a fair inquiry from foreign markets, and during October over 1,000,000 feet of lumber were shipped to the following countries: Brazil, Spain, Italy and the United Kingdom. The list of values continues to be well maintained, and at the close on Saturday last the quotations f. o. b. vessel at Savannah were as follows: Minimum yard sizes, \$10.50 to \$11; ear sills, \$12.50 to \$13; difficult sizes, \$14 to \$18; ship stock, \$16 to \$18; sawn ties, \$8 to \$8.50, and hewn ties, 35 to 38 cents. The movement at Brunswick and Darien is fairly active, and shipments continue of good volume. The offering of tonnage is moderate, and rates are steady, with recent charters as follows: Schooner Longfellow, 228 tons, from Brunswick to St. Thomas with lumber at \$8.50; schooner Sagamore from Brunswick to Boston with ties at 18 cents; schooner Republic, 580 tons, from Brunswick to New York with lumber at \$5.75; schooner William Neely, 792 tons, Brunswick to New York with ties at 16 cents, and schooner J. G. Schmidt, 450 tons, from Savannah to Philadelphia with lumber on private terms.

Mobile.

[From our own Correspondent]
Mobile, Ala., November 26.

The market for timber and lumber last week was quiet, with the volume of business lighter than usual. The timber market is weak, with stocks more than ample for the demand. Sawn timber when placed upon the market will bring 12½ to 13 cents per cubic foot, 40-foot basis, and hewn timber 13 to 13½ cents per cubic foot. Hewn oak is in limited demand at 15 to 18 cents per cubic foot, and poplar is

selling well at 12 to 13 cents per cubic foot. Cypress logs are quoted 6 to 8 cents per cubic foot, and oak logs at \$8 to \$12 per 1000 feet. Pine saw logs are in good demand at \$5 to \$8 per 1000 feet, as to average and quality. The lumber market continues fairly active, with prices very steady and the general demand more pronounced. Mills at all nearby sections are fully occupied, and have orders to keep them occupied until the new year. The shipments of lumber last week aggregated 254,963 feet, and for the season 17,954,416 feet, against 30,046,700 feet last season. The shipments of timber aggregated 2,308,256 superficial feet of sawn, and 47,045 feet of hewn.

New Orleans.

[From our own Correspondent]
New Orleans, La., November 26.

The course of the lumber market has shown but little change during the past fortnight, and while politics and the numerous questions involved have been laid aside for the moment, everything pertaining to the lumber industry is working more satisfactorily. In timber the market is quiet, owing to discouraging reports from Europe, and prices are easy, while the demand is much less than the output. It is thought that production will be somewhat curtailed until after the new year, when it is expected there will be a revival in trade. With lumber the situation is different, and during the present month considerable improvement has taken place in the market. Values are very steady, and mills, as a rule, are well supplied with orders, both in yellow pine and hardwoods. The cypress trade is fairly active, and in all matters relating to this industry conditions are very encouraging. The demand is good, and prices firm, with all the mills running at their full capacity. Stocks are light, and shipments are made as fast as the lumber becomes in fit condition for use. The volume of business in cypress lumber was better than usual last week, and purchases of 2,500,000 feet were made by St. Louis companies, which will all be shipped by the St. Louis Steel Barge Line. The opening of the steel-barge line to St. Louis offers great possibilities in connection with the Lake Borgne canal. This canal will throw open the entire Mississippi sound territory, and will mean the bringing of an immense lot of yellow pine to New Orleans which now seeks some other outlet. It will open an all-water route from Mississippi coast mills to St. Louis. All the contracts for the completion of the canal have now been let. J. J. Frawley has the contract for building the levees; Fritz Jahncke has been awarded the contract for the revetment work, and the Illinois Steel Co. of Chicago is to furnish the massive lock-gates. The locks have already been pumped out, and the concrete foundations are now being put in place. The receipts of building material at this port show a decided increase over previous years, and the figures given by Secretary Dirmeyer of the Mechanics, Dealers and Lumbermen's Exchange are very significant. Receipts of lumber for 1899-1900 aggregated 101,286,115 feet, shingles 17,838,250, laths 3,178,000, oak staves 12,386,610 and cypress staves 2,961,733. The increase over last year is as follows: Oak staves, \$11,689; cypress staves, 932,449; building and paving brick, 371,000; lumber, 12,183,590 feet; shingles, 10,944,400; laths, 2,700,300; lime, 5824 barrels. Sand shows a decrease of 39,705 barrels, and cement of 67,653 barrels. The greatest increase, and one that shows the growth of New Orleans as an export point, is in lumber, which shows an increase of 29,377,115 feet over four years ago and an increase of 183,590 feet over last year. Building

and paving brick show an increase of 11,215,000 over four years ago, while shingles for a like period have an increase of 9,687,250. There is still a demand for desirable tracts of timber land, although not so decided as some weeks ago, which may be attributed to the quiet tone in lumber during the summer; pine timber land on an average about \$8 an acre, a drop of about \$2 per acre. The market now, however, is better, and as lumber improves desirable timber lands will also appreciate in value.

Lumber Notes.

The charter of the Acme Kitchen Furniture Co. of Hamilton county, Tennessee, has been amended, increasing the capital stock from \$10,000 to \$30,000.

The receipts of lumber at New Orleans for the week ending the 23d inst. amounted to 2,154,000 feet, and for the season 37,073,121 feet, against 30,792,371 feet last season.

The Brenham Furniture Co. of Brenham, Texas, has been chartered, with a capital stock of \$100,000. The incorporators are Heber Stone, D. C. Stone and A. D. Childress.

The schooner Clara S. Bergen cleared last week from Charleston, S. C., with 350,000 feet of lumber for New York, and the schooner Pasadena for the same port with 500,000 feet.

The Pickens Bentwood Mill at Pickens, S. C., is now in full operation and doing an active business, being well supplied with timber adapted for its use in manufacturing.

It is stated that Donaldson Bros. of Double Springs, Ala., are putting in a large saw-mill plant near Ash Ridge post-office, in Winston county, Alabama, for the purpose of cutting hardwoods.

The Tennessee Lumber Canal Co. of Nashville, Tenn., has been chartered, with a capital stock of \$50,000. The incorporators are C. F. Boyer, Joseph Burger, S. M. Everett, J. H. Bellit and T. M. Brown.

The Goodwin Shingle Co. of Olney, Crittenden county, Arkansas, was chartered last week, with a capital stock of \$5000. The incorporators are A. W. Robinson, president; R. Y. Goodwin and J. A. McAdden.

The local Union Carpenters and Joiners was incorporated last week at Port Tampa, Fla., with a capital stock of \$5000. The union will buy and sell real and personal property, erect buildings and make other improvements in properties.

It is stated that the Cummer Lumber Co.'s mills at Berkley, Va., which have been closed down at intervals during the summer, will start up permanently this week. A supply of logs to keep the mills running on full time is now being received.

The John F. Davis tract of 16,000 acres of timber lands, known as a part of the Great Park estate, near Elizabeth City, N. C., will be resold on December 11, 1900, the Hon. T. G. Skinner having raised the bid of the Elizabeth City Lumber Co. to \$3000.

Lumber firms whose mills are located on Wolf river, the northern boundary of the city of Memphis, suffered heavy damage by the overflow of that stream on the 20th, estimated at about \$300,000. The losses are chiefly in the great number of timber rafts moored on Wolf river, which broke loose and were carried out into the Mississippi river.

The lumber trade at Fernandina has been unusually active during the present month. On the 19th inst. quite a fleet of vessels arrived at that port to load lumber. The docks are crowded with lumber and

the railroad yards with loaded cars, and dealers and shippers predict that this will be the heaviest shipping season for lumber in the history of the port.

The steamship Chicklade cleared from Sabine Pass and sailed on the 11th inst. for Fecamp, France, and West Hartlepool, England, carrying 1,564,620 feet of lumber and timber shipped by the Sabine Export Co. The steamship Fulton cleared on the 13th and sailed on the 14th for Coatzacoalcos, Mexico, carrying 565,603 feet of pitch-pine lumber shipped by the Reliance Lumber Co.

The Rodman-Ringeman Lumber Co. at New Decatur, Ala., is erecting a band-saw mill on the river front at that place. This company handles great quantities of quarter-sawed oak, which it ships to foreign markets. A party of Chicago capitalists arrived last week at New Decatur seeking a field for investments, and at once began making an inspection of timber and mineral lands.

Sales of cypress lumber last week in New Orleans were made aggregating 2,500,000 feet. The purchasers represented the following St. Louis concerns: Huttig Sash & Door Co., 1,000,000 feet; Mechan Planing Mill Co., 750,000 feet, and the Haffner-Lotham Manufacturing Co., 750,000 feet. Shipments by the St. Louis Steel Barge Co. will begin at once and the business will all go to the barge line. All three of the above orders were placed with the Southern Cypress Co.

The facilities at High Point, N. C., for transforming the hard woods and soft woods of the State into furniture are becoming every day more complete in their character. At present there are twenty-three factories at that place, and High Point has achieved a wide reputation for cheap furniture. Recently forty carloads were shipped to Chicago, and large quantities are being shipped to the center of the furniture-making industry at Grand Rapids, Mich. Goldsboro, Durham, McBane, Marion and other towns in North Carolina are also turning out large quantities of furniture.

Among the shipments from Jacksonville, Fla., last week were the following vessels: Schooner E. C. Pendleton for New York with 350,000 feet of yellow-pine lumber; schooner Thomas Wipsmore for Philadelphia with 350,000 feet; British schooner for Governor's Harbor, Eleuthera, British West Indies, with 65,000 feet of lumber and 22,000 shingles; schooner Wanola for Basse Terre Gaudelope with 251,307 feet of lumber; the Clyde steamer Carib for Boston with 250,000 feet of lumber, 1000 crossties and 1000 bundles of shingles, and the steamer Algonquin for New York with 320,000 feet of lumber and 4000 crossties and other cargo.

The formal opening of the new saw-mill plant of the Sullivan Timber Co. at Mobile took place on the 20th inst., when Captain Black, the president of the company, invited a number of his friends to inspect the plant. The mill is complete in every particular, the machinery having been furnished by the Filer & Stowell Company of Milwaukee, Wis. There is also a steam log-turner and head-blocks operated by steam, a new invention by Clinch, Prescott & Co. of Menominee, Mich. The new plant replaces the mill which was built on April 14 last. It has a daily capacity of 100,000 feet. This is the second time that the Sullivan Timber Co. has suffered by fire, but on both occasions the burned portion of the plant has been replaced with something better. The company has recently made large purchases of virgin pine lands in Monroe and Clark counties, and has also constructed a logging railroad through them.

Lumber firms whose mills are located on Wolf river, the northern boundary of the city of Memphis, suffered heavy damage by the overflow of that stream on the 20th, estimated at about \$300,000. The losses are chiefly in the great number of timber rafts moored on Wolf river, which broke loose and were carried out into the Mississippi river.

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PHOSPHATES.

Phosphate Markets.

Office Manufacturers' Record,
Baltimore, Md., November 28.

A moderate movement is reported in phosphate rock in the local market, and during the week sales have been of better volume, with prices about steady. There has been a fair offering of Tennessee and Florida rock, while South Carolina rock is firm, with light receipts. From the Southern phosphate belt reports are more or less favorable, shipments from all ports, however, being light. Tennessee rock holds nominally steady as follows: 72 per cent., \$2.50 to \$2.75; 75 per cent., \$2.75 to \$3, and 78 to 80 per cent., \$3.75 to \$4. There is a fair domestic demand reported in the Mt. Pleasant district, and stocks above ground are estimated at about 75,000 tons. The total shipments of rock for the nine months ending September 30, 1900, are estimated at 386,920 tons, and it is expected that shipments for the year will reach 475,000 tons. Shipments from the Maury county mines during October reached 3460 tons of phosphate rock, and from the Hickman county mines 2157 tons. The situation in South Carolina remains unchanged, and stocks are showing very little decrease, while mines in some sections are closed down for the time being, or until the market improves. Prices are nominally firm, and holders are not disposed to make concessions. The Florida phosphate field is becoming more actively worked, and miners continue to make regular shipments of land rock to the ports. Shipments of high-grade Florida phosphate rock from the ports during October were light, amounting to 35,575 tons. Shipments of pebble rock from Port Tampa continue of good volume.

Fertilizer Ingredients.

The market for ammoniates is somewhat easier, with a good demand for any offerings at concessions from sellers' prices. There is some Eastern demand, but the principal business of the week has been from Southern sources. Stocks of blood and tankage in the West are fairly held by packers. Nitrate of soda is steady. Sulphate of ammonia is firm. The following table represents the prices current at this date:

Sulphate of ammonia (gas)....	\$2.75	@ 2.80
Nitrate of soda, spot Balt....	1.85	@ 1.90
N. York.	1.75	@ 1.80
Blood	30	@ 2.35
Azotine (beef).....	22	22.25
Azotine (pork).....	22	22.25
Tankage (concentrated).....	2.20	@ 2.25
Tankage (9 and 20).....	2.25	& 100
Tankage (7 and 30).....	19.50	@ 20.00
Fish (dry).....	25.00	@ 27.00

Phosphate and Fertilizer Notes.

The British steamship Ellamy was cleared last week from Pensacola by the Gulf Transit Co. with 2857 tons of Tennessee phosphate rock and other cargo for Venice.

The schooner Mary Curtis sailed last week from Charleston, S. C., for Richmond, Va., with 550 tons of phosphate rock, and the schooner S. B. Marts for Baltimore with 800 tons.

It is estimated that the shipments of phosphate rock from the Middle Tennessee fields for the first nine months of the present year were 320,741 tons, against 300,590 tons for the corresponding period in 1899.

The plant of the American Kaolin Co., located in the southern part of Lake county, Florida, is now nearing completion. The estimated capacity is fifty to seventy-five tons per day. It is expected that the output will be going forward by the first day of January, 1901. The company is composed of New York capitalists, and its properties are said to be

valuable, the kaolin deposits being equal to the best porcelain clays of the Old World.

Col. S. W. Vance, phosphate commissioner of South Carolina, returned last week from an inspection of the phosphate-mining companies in Beaufort, Port Royal and adjoining sections. Colonel Vance states that the Coosaw Company has 60,000 tons of rock awaiting shipment, but owing to the fact that so few "tramp" steamships are available the miners find it impossible to market their product in European markets. Usually there have been a number of steamships in the two ports to take off the product, but owing to the Transvaal war and to the chartering of every available British steamship by the British government, comparatively few of them have been obtainable for commercial purposes. There is likely to be a great demand for South Carolina phosphate in Japan. Agents of the government of that empire have already been making inquiries, and the outlook is that much of the rock now on hand may be shipped to the Far East instead of to Great Britain and the Continent. In consequence of the large accumulation of rock which has not yet been disposed of, and owing to the fact that companies will mine no more than local demands warrant, it is expected that the revenue from the phosphate industry will fall behind what it reached last year.

On November 30 a meeting of all persons interested in the development of Wheeling, W. Va., will meet for the purpose of final organization of a board of trade. A committee, charged with the duty of recommending the name of some one for secretary, has selected William S. A. Thompson, formerly secretary of the Duluth Chamber of Commerce.

Delegates from Tennessee, Georgia, Alabama, Mississippi and Kentucky attended the meeting last week at Sheffield, Ala., of the Tennessee River Improvement Association, which memorialized Congress to appropriate \$1,460,000 for the improvement of the Tennessee and its tributaries, and passed resolutions favoring the restoration of the American merchant marine and the building of the Nicaragua canal.

The Laurens Manufacturing Co. of Laurens, S. C., which has been operating its furniture factory since September 1, has built up an extensive business. The company has a paid-up capital of \$25,000, all home capital. The company has recently made large shipments of furniture to six different States, and has just booked a \$20,000 contract with a large St. Louis firm. The output of the factory consists of high-class chamber suits, dressers, sideboards, etc., of oak, the bulk of material for manufacture being obtained from the surrounding country.

One of the largest saw and planing mills on the line of the New Orleans & Northeastern Railroad is now building at Ellisville, Miss. The promoters of this enterprise are B. F. Fridge, C. G. Steadman, Wyatt Collins and others, incorporators of the Tallahala Lumber Co., whose mills were erected about four months ago, just south of Ellisville. The new plant when completed will represent an outlay of \$300,000. The concern is building a standard-gauge railroad, which passes through one of the finest belts of long-leaf yellow pine and hardwood timber in the country, the belt being unbroken and extending from Ellisville to the Gulf. The company, already large owners of timber lands, closed a deal last week for an additional 8000-acre tract.

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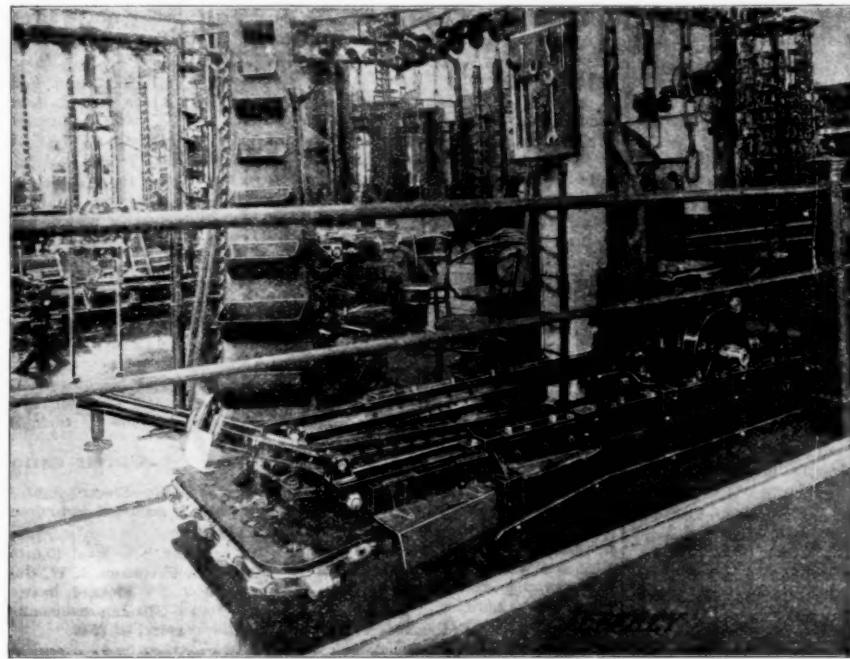
Paris Exhibit of Jeffrey Mfg. Co.

A photograph reproduced herewith shows the Paris exhibit of the Jeffrey Manufacturing Co. of Columbus, Ohio. The exhibit gives visitors an idea of the great diversity of coal-mining machinery and elevating and conveying apparatus constructed by the company. The inge-

at the exposition. S. B. Belden of the Pittsburgh office had charge of the exhibit.

Enclosed Electric Motor.

The bi-polar type of enclosed motor, the internal construction of which is illustrated in the accompanying engraving, is manufactured both as a motor directly connected to a propeller fan and as an independent machine. For the former purpose it is used on all sizes of fans up to



PARIS EXHIBIT OF JEFFREY MANUFACTURING CO.

nuity that has been displayed in designing machines for working under ground in coal mines is represented by the "Jeffrey 17A Electric Chain Mining Machine," shown in operation. The "16D Air Chain-Mining Machine" is also shown, operated by compressed air, for the visitors' benefit. These two machines are great novelties in Europe, as it is claimed engineers of that country have not succeeded in producing machines as compact, powerful and efficient. Many Jeffrey machines are now at work in European mines. Electric and compressed-air rotary coal drills are also shown in the exhibit, attached to power so that they can be shown in operation. An artistic arrangement is also shown of the many styles of chains so extensively used in America for elevators and

and including the 54-inch. For larger sizes the four-pole and eight-pole types are employed.

The motor is entirely enclosed, and thereby protected from dust, a most important element in a machine used under these conditions. In order to avoid the excessive temperature which is incident to the operation of most enclosed motors, this type has been very carefully designed, so that a low temperature rise can be maintained without greatly increasing the size and weight above that of the ordinary open type.

This machine is capable of continuous operation for ten hours, with a maximum temperature rise not exceeding 60

degrees F. Yokes extending out from the field ring support the armature shaft. The end

are self-oiling and self-aligning and fitted with composition sleeves, which are removable from the outer ends of the boxes. These motors in sizes from one-sixth to five horse-power are built by the B. F. Sturtevant Co., Boston, Mass.

Metal Sash-Bars.

In business establishments designed with a view of displaying merchandise it is desired that the view of the show-

when the bars are placed in position they appear as solid metal.

They give to the windows the appearance of a handsome showcase.

They are made in many sizes and shapes, one of which is here illustrated.

Sizes and prices may be obtained of the E. T. Barnum Iron and Wire Works, Detroit, Mich., manufacturers of wire, iron, brass and steel goods of all kinds.

The Sackett Pulverizer.

The operation of pulverizing enters into the conduct of many important manufacturing plants. The hardness of the substances to be treated has been no bar to the invention and construction of machinery fully efficient for the purpose of thoroughly pulverizing. Some of the inventions in this department of mechanical apparatus have found an extensive clientele on both sides of the Atlantic. American-made pulverizers have been foremost in supplying users, and one of the most successful of them is shown by the accompanying illustrations. This is

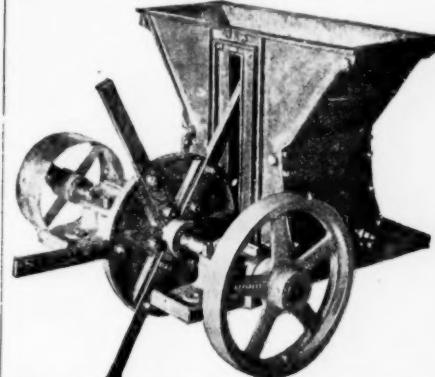
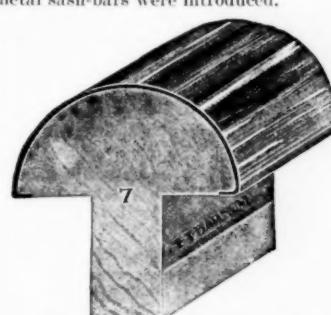


FIG. 1—SACKETT IMP'D PULVERIZER.

the "Sackett Improved Pulverizer," a device which is the result of years' experience and careful study of the requirements of pulverizing, and designed to avoid the common defects of so many mills. This machine will pulverize all hard substances, such as rock, cement, bone, coal, ore and others, and will grind to a large capacity in accordance with the nature of the material and the degree of fineness desired. It is entirely automatic in its operation, is so constructed that there is a minimum of wear on the working parts. Its wearing parts can be replaced at small cost, and its cost is placed at an equitable figure. The illustrations show a general view and a view of the machine's automatic adjustment with front and side plates removed.



METAL-COVERED SASH-BAR.

The latter, however, were not fully successful on account of difficulty in fitting them and their rusting propensities. They, however, possessed so many ex-

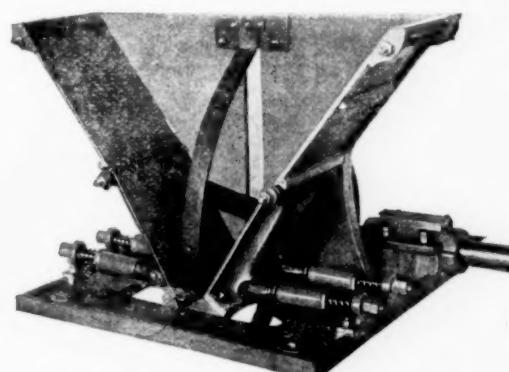


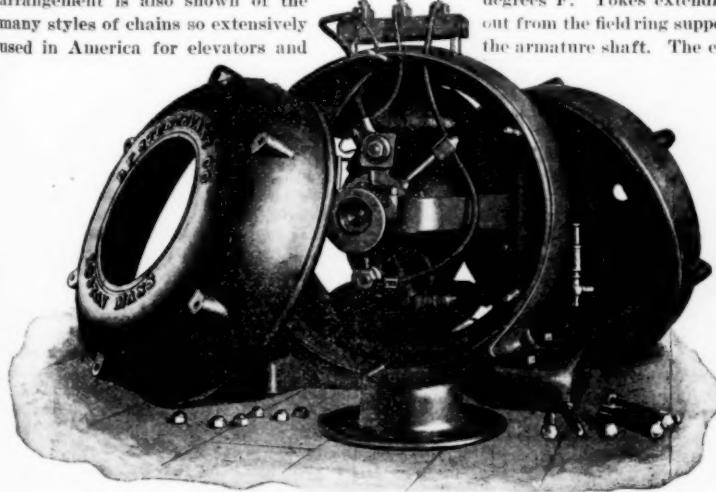
FIG. 2—SACKETT IMPROVED PULVERIZER.

cellent features that a substitute has been devised and is rapidly becoming popular.

The metal-covered sash-bars are light, strong, handsome, and will not rust. The core of these bars is of hardwood, over which is drawn a heavy sheet of copper, bronze, German silver or brass, all of which are non-corrodible. The metal covering is drawn through dies, giving a perfectly even and smooth surface, and

for milling acid phosphate and manipulating fertilizers this is claimed to be the most perfect pulverizing machine yet devised, and that a trial of it will demonstrate its value and prove its superiority.

Mr. A. J. Sackett of Baltimore, Md. (office, Baltimore and Holliday streets), builds this pulverizer, and is prepared to furnish promptly any further information required concerning it or other fertilizer machinery he builds.



ENCLOSED ELECTRIC MOTOR.

conveyors in mines, mills and factories. French and German engineers are said to express astonishment at the assortment and the ingenuity presented in designing these chains for so many different conditions. The exposition authorities granted three grand prizes to the Jeffrey Manufacturing Co. for the coal-mining, the elevating and the conveying machinery. A handsome Jeffrey catalogue printed in French and English is being distributed

casings are entirely independent, and can be instantly removed to give access to the entire interior. The bearings and brushes can be reached by simply removing the caps in the center of the casings.

The brushes are of hard carbon, in holders of a modified reaction type, which allows of easy adjustment when it becomes necessary to reverse the direction of rotation of the motor. The bearings

CONSTRUCTION DEPARTMENT.

THE MANUFACTURERS' RECORD
 seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in a town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and it is often advisable to add the names of one or more incorporators as an aid to the post master in delivering mail.

ALABAMA.

Anniston—Laboratory.—Dr. J. L. McClinock of Heillin, Ala., will establish proprietary medicine factory at Noble and Eighth streets, Anniston.

Bessemer—Sewerage System, etc.—A resolution has been passed authorizing the city to issue \$5,000 of bonds for sewerage system, street improvements, etc.; R. C. Jones, city attorney.

Decatur—Saw-mill.—Mr. Cushman has established a saw-mill.

Decatur—Saw-mill.—The Rodman-Ringe-mann Lumber Co. is erecting a small band saw-mill.

Demopolis—Cooperage.—The Demopolis Cooperage Co. has reorganized, with capital stock of \$50,000, and J. A. Carey, president and manager; E. D. Carey, secretary; J. R. Robertson, treasurer, and Cadwallader Jones of Selma, vice-president. Company will increase capacity of its plant and make other improvements.

Gadsden—Milling and Ginning Plant.—Cas-sells Bros., reported lately to enlarge their plants, state that no definite arrangements have been made for enlarging, but the matter is under consideration.

Jenifer—Iron Furnace.—The Jenifer Furnace Co., principal office at Anniston, is improving its furnace, and will blow it in about January 1; improvements include new boilers, heightening the stack, increasing the bosh, etc.; capacity will be increased from fifty to eighty tons.

Pratt City—Electric-light Plant.—The city does not contemplate the establishment of an electric-light plant, as recently reported; E. J. Hudnall, mayor.

Sylacauga—Cotton Mill.—The McDonald Cotton Mills, reported last week as purchased by Messrs. D. L. and J. T. H. Lewis, is to install 10,000 spindles, although power is in place for 20,000. The mill buildings are completed and the textile equipment is expected to be in place early in 1901. D. L. Lewis is president.

Tuscaloosa—Saw-mill.—The Industrial Farm will operate a saw-mill. Address C. C. Steward, general manager, Bristol, Tenn.*

ARKANSAS.

Olney—Shingle Mill.—The Goodwin Shingle Co. has been incorporated, with capital

stock of \$5000, by A. W. Robinson, president; R. Y. Goodwin, J. A. McCadden and others.

FLORIDA.

Jasper—Electric-light Plant, Ice Plant and Water-works.—B. E. Lenhardt, C. W. Smith, W. H. Greene and M. F. Home will establish electric-light plant, water-works and ice plant.

GEORGIA.

Augusta—Lumber Mills.—The Youngblood Lumber Co. is erecting buildings for a new lumber, door, sash and blind factory. Complete equipment of machinery will be installed.

Ball Ground—Mica Deposits.—Cox & Graves are working mica deposits and will soon be grinding the smaller parts and grinding from the sheets.

Elberton—Machine Shop.—A machine shop for repairing engines, boilers, gins, saw-mills, etc., will be established. Address J. A. Almand.*

Elberton—Flour Mill.—D. P. Oglesby and H. J. Brewer will establish a \$10,000 roller flour mill with capacity of from 100 to 150 barrels per day.

Fairfax—Saw-mill.—J. R. & T. Bunn are erecting new saw-mill.

Jackson—Ice Plant.—S. C. McCandless states that there is no likelihood of his building an ice plant this year, as lately reported.

Jonesboro—Electric-light Plant.—The city contemplates the erection of electric-light plant. Address "The Mayor."

Quitman—Laundry.—John Harrell is erecting new building for the Quitman Steam Laundry.

Tallapoosa—Cotton Mill.—J. M. McBride, C. B. Hitchcock, W. W. Summerlin, J. C. Tunlin and others are securing subscriptions for the erection of a cotton-yarn mill. Address J. M. McBride.

West Point—Supply Company.—The Planters' Supply Co. has been organized, with authorized capital of \$50,000. E. J. Collins is president; W. L. Hardy, vice-president and manager; A. J. Hogg, secretary and treasurer.

KENTUCKY.

Henderson—Filter Plant.—The "Water-Works Commissioners" will install a \$20,000 filter.

Lakeland—Hall.—H. P. McDonald of Louisville has made plans for an amusement hall for the Central Kentucky Lunatic Asylum, 90x124 feet.

Louisville—Refinery.—Capt. H. N. Gifford, J. B. Speed, Col. J. S. Bockee and William A. Robinson have purchased the Globe Refining Co.'s plant for \$300,000 and will enlarge and operate it.

Louisville—Sewage Improvements.—The city will issue \$250,000 of bonds for improvements to its sewerage system. Address "The Mayor."

Louisville—Cigarette and Tobacco Factory.—Chas. Buchanan of New York contemplates the establishment of cigarette and tobacco factory in Louisville.

Mayfield—Soap Factory.—E. S. Beaumont, T. J. Murphey, Edwin B. Cosby and Oscar Elmore have organized the Beaumont Soap Co., with capital stock of \$10,000, for the manufacture of soaps, candles, etc.; company will erect its own building later. Messrs. Beaumont, Elmore and Cosby are respectively president, vice-president and secretary-treasurer. Address the secretary.*

Maysville—Shoe Factory.—John C. Adamson of Maysville, Robert and Charles Herschfeld and a Mr. Seehaum of Cincinnati, Ohio, are organizing a company for establishment of factory in Maysville with daily capacity for 200 pairs of shoes; building has been secured and contract awarded to L. M. Lane for erection of an addition. It is said that Herschfeld & Seehaum will remove an established plant to Maysville.

Paducah—Water Supply.—The city is reported to increase its water supply; Harry Fisher, city clerk.

Wickliffe—Water-works.—The city will issue bonds for construction of system of water-works. Address "The Mayor."

LOUISIANA.

Crowley—Electric-light Plant.—The city has purchased and will enlarge the electric-light plant of Henry Widmer. Address "The Mayor."

McDonoghville—Ice Plant.—The Westwego

Fish, Oyster & Provision Co. has contracted for a 25-ton refrigerating and ice plant.

Meeker—Sugar Refinery.—A stock company will probably be formed for rebuilding the Jos. H. Meeker refinery, reported recently as burned. Address F. G. Drouet, executor estate of Jos. H. Meeker.

New Orleans—Elevator.—It is reported that the Illinois Central Railroad Co. will build a 400,000-bushel grain elevator at Stuyvesant Docks, adjoining its present elevator; Stuyvesant Fish, president, New York, N. Y.

Opelousas—Telephone Exchange.—The Cumberland Telephone & Telegraph Co., New Orleans, La., will establish an exchange at Opelousas, as lately reported; will also build at Alexandria and Kentwood.

Shreveport—Brewery.—The Houston (Texas) Ice & Brewing Co. informs the Manufacturers' Record that there is no truth in the report, mentioned last week, that it will build brewery in Shreveport.

MARYLAND.

Baltimore—Real Estate.—The Central Real Estate Investment Co. has been chartered, with capital stock of \$10,000, by Geo. R. Gaither, Herbert A. Smith and others.

Baltimore—Novelty Factory.—The Wood Novelty Co. has been incorporated, with capital stock of \$20,000, by Edwin L. Tunis, Howard H. Tunis, Samuel T. Addison and others for the manufacture of household articles.

Baltimore—Incineration Plant.—Contract has been awarded by the city to Samuel A. Rice at \$148,000 per year for ten years to collect and dispose of garbage. Incineration plant will be built.

Baltimore—Gas Franchise.—R. Stanley Carswell, president of the American Street Lighting Co., has contract to maintain the city gas lamps for three years at \$87,730 per year.

Baltimore—Bridges.—The Baltimore & Lehigh Railroad Co. will shortly award contracts for construction of three steel bridges; W. A. Moore, general manager.

Cambridge—Ice Factory.—The Cambridge Water Co. will enlarge its ice factory.

Denton—Bridge.—The Caroline county commissioners are considering plans for a new bridge across the Choptank river.

Bridgely—Crate, etc., Factory.—T. L. Day, Swing & Co. are erecting a new crate, basket and box factory 100x76 feet.

MISSISSIPPI.

Aberdeen—Gin and Mill.—The Aberdeen Gin & Milling Co. has been incorporated, with capital stock of \$3500, by W. B. Watkins and G. H. Watkins.

Bogue Chitto—Planing Mill.—B. E. Brister & Co. will rebuild their planing mill, recently burned; will complete it in sixty days; nearly all machinery has been purchased.*

Carrollton—Hardware and Implement Company.—The Carrollton Hardware & Implement Co. has been chartered, with capital stock of \$6000, by H. Kelso, C. R. Kelso and R. N. Gandy.

Columbus—Trunk Factory.—W. M. & O. B. Lawrence will establish a trunk factory.

Ellisville—Lumber Mills, etc.—The Tallahatchie Lumber Co. is making extensive improvements, as reported several weeks ago; improvements include large planing mill, additional machinery for increasing capacity, etc.; company has also purchased an 800-acre tract of timber lands.

Natchez—Telephone System.—A company will be organized for establishment of a telephone system from Natchez to Newellton and St. Joseph, La. Address "Secretary Business League."

Raymond—Gin.—The Raymond Gin Co. has been incorporated, with capital stock of \$10,000, by W. D. Lee, D. F. Fofton and B. F. Lee.

MISSOURI.

Carthage—Mining.—Chartered: The Sure Thing Mining Co., with capital stock of \$8000, by J. L. Webb, Jerry Eastridge and others.

Carthage—Milling.—The McDaniel Milling Co. has been chartered by F. M. McDaniel, George D. McDaniel and others, with capital stock of \$40,000.

Joplin—Mining.—Chartered: The Ida Mining Co. has been chartered, with capital stock of \$100,000, by P. L. Mullins of Lake Forest, Ill.; W. E. Vary, Chicago, Ill.; E. Sadler of Joplin and others.

Kansas City—Telephone System.—The El Dorado Springs Telephone Co. has been incorporated, with capital stock of \$10,000, by C. A. Ross, Frank W. Hiatt, A. P. Nichols and others. Address last-named.

Mountain View—Lumber Company.—The Bunker Lumber Co. has been incorporated, with capital stock of \$30,000, by S. J. Bunker, H. O. Bunker, A. P. Davenport and others.

Springfield—Flour Mill.—John F. Meyer & Sons will erect a new flour mill.

St. Louis—Navigation Company.—The Mississippi River, Gulf & South Atlantic Navigation Co., with capital stock of \$16,000, by D. W. McCallum, W. L. Freeman, W. E. Kuhoff and others.

St. Louis—Manufacturing.—Chartered: The Benbow-Brammer Manufacturing Co., with capital stock of \$50,000, by Henry F. Brammer, Paul T. Benbow and others.

St. Louis—Mining.—The Virginia-Julia Mining Co. has been chartered, with capital stock of \$5000, by H. W. Baker, James Axtell, L. W. Day and others.

NORTH CAROLINA.

Asheville—Electric-light Plant.—Alexander Field is reported as to erect an electric-light plant.

Chapel Hill—Real Estate.—F. P. Venable, H. H. Patterson, J. W. Gore, W. S. Robeson and J. F. Pickard have incorporated the Chapel Hill Improvement Co., with authorized capital of \$2500.

Charlotte—Cotton Mill.—A company is being formed, with E. A. Smith, president, and capital stock of \$200,000, for the establishment of a 10,000-spindle and 300-loom cotton mill. J. P. Wilson is also interested, and W. B. Smith Whaley of Columbia, S. C., is the engineer.

Fayetteville—Electric-light Plant.—The city will issue bonds for erection of a municipal electric-light plant. Address "The Mayor."

Goldsboro—Land Development.—Geo. A. Norwood, Jr., Geo. C. Royal, John Slaughter, J. R. Crawford and the Humphrey-Gibson Co. have incorporated the Goldsboro Land & Investment Co. for the development of a tract of land; capital stock is \$100,000.

High Point—Laundry.—Jeffreys & Curtis, proprietors of the Piedmont Steam Laundry, are enlarging their plant and buildings.

Morganton—Monazite Deposits.—John Kirksey, representing Northern capitalists, is contracting for the purchase of large quantities of monazite in Burke county, and will erect plant at Morganton for cleaning the same by means of magnets.

New Berne—Ice Plant.—The New Berne Ice Co. will install a 25-ton plant to increase capacity; contract awarded.

Roanoke Rapids—Cotton-damask Mill.—The Putnam Textile Co. has been incorporated by Gustavus Millhiser of Richmond, Va., and S. L. Patterson of Roanoke Rapids for the manufacture of cotton goods. This company will build and operate the cotton-damask mill reported last October as to be located by Mr. Millhiser. Contract for two-story 106x320-foot building has been placed; water-power will be used.

Rocky Mount—Machine Works.—The Railway Advertiser & Station Indicator Co. has been incorporated, with capital stock of \$50,000, for the purchase and manufacture of a patent machine of L. H. Simmons, J. C. Braswell, M. Griffin, Thomas H. Battle, E. H. Crews and J. H. Battle, Jr., are the incorporators.

Washington—Ice Factory.—The Crystal Ice Co. will enlarge its plant by the installation of a 25-ton plant; contract has been awarded.

SOUTH CAROLINA.

Anderson—Collar Factory.—Van Wyck & Vandiver will engage in the manufacture of cloth cotton-filled horse collars.*

Barwell—Mercantile.—Chartered: The Cave-Walker Company, with capital stock of \$3000, by W. L. Cave and others.

Columbia—Refrigerating Plant.—It is reported that the Armour Packing Co. of Kansas City, Mo., will establish a \$10,000 refrigerating plant in Columbia. R. W. Gilliam, local agent, may be addressed.

Dillon—Electric-light Plant, Water-works and Sewerage System.—The city contemplates the installation of a complete system of electric lights, water and sewerage. Address S. S. Rozier, intendant.*

Inman—Cotton Mill.—A. H. Twichell, J. A. Chapman of Spartanburg, T. C. Duncan of Union and J. R. Gibson and R. H. F. Chapman of Inman have incorporated the Inman Cotton Mills, with \$200,000 capital, for establishment of the cotton mill reported during the week.

Laurens—Electric-light Plant.—The Laurens Furniture Manufacturing Co. will install an electric-light plant.

Spartanburg—Electric-light and Gas Plant. The organization of the Spartanburg Railway, Gas & Electric Co. (lately reported) is for the purpose of effecting a change in the company's charter; its railway, electric-lighting and gas plants have been completed and are in operation; F. H. Knox, engineer.

TENNESSEE.

Calhoun—Stove Foundry.—Edward Bros. and H. B. Henegar, John T. Haynes and others have formed a \$10,000 company for the establishment of a stove foundry.

Chattanooga—Coal Mines.—A. R. Thomas, who recently purchased coal property on Lookout mountain, has organized a company for developments.

Chattanooga—Telephone System.—A company is being formed, with Thomas S. Wilcox, president; Sam Erwin, manager, and J. B. Whitehead, secretary-treasurer, for construction of an underground telephone system; franchise has been granted.

Chattanooga—Bottling Works and Crate, etc., Factory.—J. C. Guild, R. W. Barr, Jas. F. Johnson, Henry O. Ewing and others have incorporated the Coco-Cola Bottling Co. for manufacture and bottling all kinds of non-intoxicating drinks (plant already established). Company will also manufacture boxes, crates and packages; capital stock \$10,000.

Chattanooga—Iron Furnace.—The Chattanooga Furnace Co., C. E. James, president, will expend about \$50,000 in installing new and improved stoves.

Cleveland—Flour Mill.—The Sykes Milling Co. will install additional machinery to increase capacity of its mill.

Crossville—Electric-light Plant.—The Crossville Electric Light & Power Co. has been incorporated, with J. E. Burnett, president; W. S. De Golia, vice-president; J. A. Johnson, treasurer, and O. W. Monroe, secretary, for establishment of the electric-light plant recently reported. Address O. W. Monroe.*

Crossville—Electric-light Plant and Spoke and Handle Factory.—The Crossville Electric Light & Power Co. is being organized, with capital of \$2000, for erection of the electric-light plant lately reported; company is considering also operating a spoke and handle factory; J. E. Burnett, president; W. S. De Golia, vice-president; J. B. Johnson, treasurer, and D. W. Monroe, secretary.

Jellico—Coal Mines.—The Procter Coal Co., Knoxville, Tenn., has purchased and is now operating the mines of the Indian Mountain & Jellico Coal Co. at Jellico; J. L. Boyd, manager.

Knoxville—Furniture Factory.—Sterchi Bros. are interested in the organization of the \$20,000 company reported lately for the manufacture of furniture.*

Knoxville—Smelting Plant.—The Knoxville Zinc Mining & Smelting Co. will sink a new shaft at its mine; is also considering building a large smelting plant.

Knoxville—Barytes Deposits.—The Hiawassee Mining Co. has reorganized, with capital stock of \$250,000, and will erect large pulverizing plant and make other improvements. William Taylor and R. T. Carothers of Pittsburgh, Pa.; Chas. A. Weller and H. V. Maxwell of Knoxville are among those interested.

Knoxville—Knitting Mill.—The Knoxville Knitting Mills has purchased and will install eighteen additional machines, increasing capacity about 25,000 dozen pairs hose per year; Geo. S. Andes, general manager.

Morristown—Condensed-milk Plant.—The establishment of a condensed-milk plant is contemplated. Address R. F. Taylor, assistant secretary Board of Trade.

Morristown—Wagon Factory.—O. R. Carver is locating a \$10,000 wagon factory.

Nashville—Grain Elevator.—T. G. Ryman is building river and rail elevator, as lately reported, at a cost of \$30,000, to be operated as "The Ryman Elevator."

TEXAS.

Alvin—Dairy.—S. O. Smith, manager of the Wheeler Dairy, has located in Alvin; suitable buildings are being erected.

Beaumont—Electric-power Plant.—The erection of a power plant to supply an electric railway is contemplated. I. D. Polk can probably give information.

Brenham—Furniture Factory.—Incorporated: The Brenham Furniture Manufacturing Co., capital stock \$100,000, by Heber Stone, D. C. Stone and A. D. Childress, for the manufacture of furniture.

Collinsville—Cannery.—The Collins Cannery Co. has been organized to establish the proposed cannery; will operate next season; R. L. Hovis is secretary.*

Corsicana—Pottery.—S. Robins of McDade, Texas, proposes the establishment of a pottery in Corsicana.

Corsicana—Telephone System.—The Corsicana Telephone Co. has been incorporated, with capital stock of \$50,000, for construction of telephone system, franchise for which was recently reported as having been granted to Frank B. McElroy; other incorporators are F. C. Smith, H. M. Aubrey, Harvey Meyers and U. J. Howard.

Fort Worth—Cotton Mill.—W. J. Boaz, J. Jarvis, J. W. Spencer, Geo. E. Bennett and others are organizing a company for establishment of cotton mill.

Jacksboro—Light and Power Plant, Ice Plant, etc.—The Jacksboro Light & Power Co., reported lately as reorganized and to improve its plant, is a reorganization and change of name of the Jacksboro Ice Co.

Mineral Wells—Mercantile.—Incorporated: The Mineral Wells Hardware & Implement Co., capital stock \$35,000, by A. A. Mayer and others.

Nacogdoches—Oil-land Development.—Judge W. W. Allen of San Francisco will, it is reported, organize a \$1,500,000 company for the development of 3427 acres of oil-producing lands in the Nacogdoches district; principal office will be in Houston, and Judge Allen may be addressed at that point.

Port Arthur—Electric-light Plant.—Franchise has been granted to Charles Gates for establishment of an electric-light plant.

Port Arthur—Rice Mill.—The Port Arthur Rice Milling Co. has increased capital from \$60,000 to \$100,000.

San Antonio—Dressed-beef Company.—The Alamo Dressed Beef Co. has been chartered, with capital stock of \$50,000, to conduct general meat-packing business. Address Judge T. M. Paschal.

VIRGINIA.

Alexandria—Manufacturing.—The Peerless Manufacturing Co. has been incorporated, with capital stock of \$500,000, by Aune Campbell and N. W. Vaughan.

Berkley—Box Factory.—The Providence Box Co. of Providence, R. I., has started another box factory on the Tunis Lumber Co.'s property at Berkley, as reported lately, and will operate as the Virginia Box Co.

Berkley—Iron Works.—The Thomas Iron Works Co. has been incorporated, with Herbert Roberts, president; Cornelius Thomas, vice-president; R. E. Crump, secretary and treasurer, to build and repair steamships and vessels, engines, boilers and other machinery; capital stock is to be \$25,000.

Big Stone Gap—Coke and Coal Company.—Chartered: The Virginia Coke & Steam Coal Co.

Disputanta—Peanut Factory.—The Disputanta Peanut Co. has been organized, with A. E. Ramey, general manager, for the establishment of a peanut factory.

Ida—Copper Mine.—Copper has been discovered on the property of Thos. J. Price, and will probably be developed.

Newport News—Pier.—The Chesapeake & Ohio Railroad Co. will build a new pier to be known as No. 9; G. W. Stevens, general manager, Richmond.

Norfolk—Improvement Company.—The Elizabeth Improvement Co. has been chartered, with J. W. Perry, president; Peter Wright, vice-president; J. L. Oliver, secretary, and N. Benman, treasurer; capital stock from \$10,000 to \$25,000.

Norfolk—Real Estate.—The West Ghent Co. has been chartered to conduct general real-estate business; capital stock is from \$25,000 to \$50,000; John L. Farant, president; N. M. Osborne, Jr., vice-president; H. M. Kerr, treasurer, and W. W. Starke, secretary.

Petersburg—Peanut Mill.—The Rialto Milling Co., reported lately as incorporated, is a reorganization and change of name of Williams & Sons Co., cleaners and dealers of Virginia and Spanish peanuts.

Petersburg—Iron Works.—Chartered: The Thomas Iron Works Co.

Portsmouth—Knitting Mill.—The National Trust Co. of Washington, D. C., contemplates the establishment of a hosiery mill at Portsmouth.

Richmond—Fireproof Wood Factory.—The United States Fireproof Wood Co. of Philadelphia, Pa., contemplates establishing a fireproof wood factory in Richmond with capacity of 3,000,000 feet.

Richmond—Shipbuilding Plant.—The Wm. R. Trigg Co., lately noted in reference to extensive improvements, has awarded all contracts for new machinery and other apparatus. The company's new shipbuilding yards will be occupied about January 1, embracing about twenty-six acres, with a water front of one and three-quarter miles. The machinery will be operated by electric-power obtained from the Virginia Electric Railway & Development Co., which is just completing a plant to utilize the James river.

Richmond—Umbrella Factory.—Lee Todd is negotiating with Norwalk (Ohio) parties relative to the removal of an umbrella factory to Richmond.

Roanoke—Furnace.—The Roanoke Furnace Co. has purchased the furnace of the Crozer Iron Co. for \$500,000 and will blow in about December 1.

Roanoke—Coal Company.—The Roanoke Co-operative Supply Co. has been chartered, with A. W. Lescure, president, and J. P. Filippo, secretary and treasurer, to conduct general coal and wood business; capital stock \$10,000.

Windsor—Peanut Factory.—John A. Ashburn, L. M. Roberts and J. H. Holland have formed the Farmers' Peanut Co. and are building a factory of 300 bags per day capacity to cost \$5000; J. H. Holland, general manager.*

Woodstock—Water-works.—It has been decided by popular vote to issue the \$20,000 of water-works bonds lately reported; J. H. Rodeffer, mayor.

WEST VIRGINIA.

Benwood—Bridge.—The Wheeling, Benwood & Bellaire Bridge Co. will prepare plans for construction of a railroad and highway bridge across the Ohio river between Benwood and Bellaire to cost \$1,500,000.

Charleston—Hardware Company.—The Charleston Hardware Co. has been incorporated, with capital stock of \$100,000, by F. H. Markell, M. I. Davis and others.

Charleston—Coal Mines.—The Piney Colliery has been chartered by M. T. Davis, John Q. Dickinson, J. L. Dickinson, Enoch Carver and others.

Clifton—Broom Factory.—The Holland Broom Co. has established a broom factory.

Coit—Coal Mines, etc.—Michael Crouse, G. J. Crouse, Richard Seamore and others have incorporated the Coit Coal & Coke Co., with authorized capital of \$100,000.

Grafton—Wheel Factory.—Col. Geo. H. Smith of Webster and associates will erect a two-story building 300x80 feet and equip it for the manufacture of wagon and buggy wheels.

Martinsburg—Water-works Improvement.—The city will expend \$2225 in improvements to its water-works system. Address "The Mayor."

Morgantown—Crate and Basket Factory.—C. L. Michael contemplates erecting a crate and basket factory.*

Parkersburg—Coal Mines.—The Braxton Coal Co. has been organized by B. E. Cartwright, Ridgway, Pa.; C. B. Shaffer and J. G. Bennett, Pittsburg, Pa.; Louis Streuber, Erie, Pa., and E. E. Smathers, New York city, for the development of about 30,000 acres of coal lands in Braxton, Gilmore and Lewis counties, West Virginia, which have been secured, in connection with a projected road to the mines, which will be constructed and completed. The capital stock is \$2,000,000 subscribed.

Shaw—Coal Mines.—The Big Vein Coal Co. has been incorporated for the development of coal mines; narrow-gauge road will be constructed; A. C. Rawlings, superintendent.

Shinnston—Coal Mine.—The Hutchinson-Ellien Coal Co., reported lately as incorporated (under Fairmont), will develop a new coal mine at Shinnston. Address M. L. Hutchinson at Fairmont.

Wheeling—Clock Works.—The Poole Clock Co. has been organized and will equip a plant for the manufacture of clocks under the patent of A. F. Poole. H. M. Russell is president; Geo. Wise, vice-president; L. F. Stifel, treasurer, and J. E. B. Sweeney, secretary and manager.

Wheeling—Iron and Tinplate Works.—The National Tinplate Co., reported in November, 1899, as organized, with capital stock of \$5,000,000, by Jas. A. Beaver of Bellefonte, Pa.; W. H. Rogers and N. E. Whittaker of Wheeling; W. E. Tustin, C. A. Daily and A. B. Daily, Jr., of Pittsburg, Pa., for the manufacture of iron, tinplate and other materials in various forms, will within a few

weeks open books in Wheeling and Pittsburgh for subscription. Site has not as yet been selected for plant, but it will in all probability be located in Wheeling.

Wheeling—Coal Mines.—A Mr. Thompson of Uniontown, Pa., has purchased 7000 acres of coal lands in Brooke and Ohio counties, the property optioned several months ago by John M. Birch of Wheeling and W. M. Dunlap of West Alexander, Pa., and to develop which the Wheeling Consolidated Coal Co. was organized.

Wheeling—Electrical Works.—The Sands Electrical Co. has awarded contract to B. F. Perkins at \$5000 for erection of a new building in which will be installed two 100-horsepower gas engines and electric-lighting dynamos.

Wheeling—Wire-nail Works.—Local rumor states that the Laughlin Nail Works have had plans made for erection of a new plant to cost, with machinery, about \$500,000, but no official information has been given out.

Wheeling—Coal and Coke Company.—Chartered: The Byron Coal & Coke Co., with authorized capital of \$5000, by J. J. Jones, John A. Howard, James K. Hall and others.

BURNED.

Charleston, W. Va.—Jennings Company's plant; estimated loss \$12,000.

Fredericksburg, Texas.—Krueger Cotton Gin; loss \$2000.

BUILDING NOTES.

Alvin, Texas—Business House, etc.—C. S. Cumming has closed contract for erection of a two-story frame business house 40x40 feet; will also build residence and several cottages.

Atlanta, Ga.—Stores and Hall Building.—Permit has been granted for erection of a \$25,000 stores and hall building by the J. W. Rucker estate.

Atlanta, Ga.—Apartment-house.—J. G. Trull of La Grange, Ga., will erect a \$260,000 apartment-house in Atlanta to contain all modern improvements, including steam heat, gas and electric lights, elevators, etc.

Baltimore, Md.—Dwelling.—C. H. Clarke will erect three-story pressed brick and stone dwelling to cost \$4000.

Baltimore, Md.—Truckhouse.—C. Sheehan & Sons have received contract for erection of No. 11 truckhouse, lately reported, for \$17,125.10.

Bessemer, Ala.—School Building.—The city contemplates erecting a \$15,000 school building; R. C. Jones, city attorney.

Carrollton, Ga.—Church.—Plans are not completed yet for obtaining funds for the erection of church lately noted, but a \$10,000 structure is probable. Rev. W. E. Dozier is pastor.

Coal Creek, Tenn.—School Building.—The city will build \$10,000 school building. Address "Board of Education."

Columbia, S. C.—Business College.—The Twentieth Century Business College has been incorporated, with W. H. Macfeat, president.

Florence, Ala.—Residence.—W. T. Kelly will build a residence.

Gadsden, Ala.—Store Building and Hotel.—R. B. Kyle has let contract for erection of store building of brick, two stories, 50x90 feet. R. A. Mitchell, agent, has let contract to W. H. Mayben for rebuilding the Dwight Inn at a cost of \$5000.

Havre de Grace, Md.—Residence.—Winfield S. Reynolds will build two-story residence of brick, 25x30 feet.

Houston, Texas—Store and Office Building.—A. N. Dawson has prepared plans for a three-story brick store and office building for Berry W. Camp to cost about \$20,000.

Knoxville, Tenn.—Theater.—Fritz Staub has definitely decided to build the theater lately reported as contemplated; structure will cost \$25,000. Plans are wanted from architects, and bids are to be opened early in 1901.

Lumberton, N. C.—Mill.—The Lumberton Cotton Mills has awarded contract to the McCall Novelty Works of McCall, S. C., for erection of brick building 100x125 feet.

Newport News, Va.—Hotel.—George E. Connell will prepare plans for a \$1,000,000 hotel to be erected at Pig Point, to include two buildings, six stories, one 193x50 feet and the other 175x100 feet, 400 rooms, complete electric-light and hot-water plants and three 15,000-gallon water tanks.

Paducah, Ky.—Hospital.—D. F. Davis has contract at \$21,700 for enlargement of hospital.

Machine Tools.—Wanted—New and second-hand machine tools. Address J. A. Almand, Mattress Machinery.—Sterchi Bros., Knoxville, Tenn., want information regarding machinery for weaving wire mattresses.

Metal-working Machinery.—J. B. Jones & Co., 310 Morgan street, Allegheny, Pa., are in the market for extra heavy alligator scrap shear and a cold-saw for cutting heavy shafting, beams, etc.

Mining Equipment.—Wheatcroft Coal & Mining Co., Blackford, Ky., is in the market for second-hand hoisting outfit suitable for slope mine, grade six inches to the yard; wants to handle eight to ten mine cars per trip and wants a double-acting engine; is also in market for new or second-hand mine cars, gauge three feet six inches, hoisting drum to be about seventy-two inches or larger.

Paper-box Manufacturers.—American Pine Product Co., Washington, N. C., wants to correspond with manufacturers of cartons and paper boxes for mailing samples, manufacturers of mailing cases for liquid samples, printers of paint-ad. matter, labels, etc.

Paper Sacks.—Harralson Estanillo & Co., Pedros street No. 2, Havana, Cuba, want addresses of manufacturers of coffee paper sacks.

Railway Equipment.—See "Mining Equipment."

Roasting and Grinding Equipment.—Harralson Estanillo & Co., Pedros street No. 2, Havana, Cuba, want complete outfit for roasting and grinding coffee.

Saw-mill.—The Columbus Saw Mill Co., Columbus, Ohio, is in the market for a band mill, etc.; second-hand.

Saw-mill Equipment.—The Industrial Farm, C. S. Steward, manager, Bristol, Tenn., is in need of an engine and saw-mill outfit.

Saw-mill Equipment.—D. T. Lee, Eagle Rock, N. C., wants to purchase 30 or 40-horse-power boiler and engine and complete saw-mill equipment.

Soap Factory.—Beaumont Soap Co., E. B. Corby, secretary, Mayfield, Ky., is in the market for complete equipment for soap factory; also for raw materials.

Steam Shovel.—See "Cotton Ginnery."

Telephone Equipment.—Blotcon-Cahaba Coal Co., Blotcon, Ala., wants addresses of manufacturers of and dealers in equipment for six-mile telephone line.

Theater Equipments.—See "Building Materials."

Toothpick Machinery.—C. C. Crawford, Asheboro, N. C., wants to correspond with manufacturers of toothpick machinery.

Water-wheels.—See "Electrical Machinery."

Water-works.—Dillon, S. C., wants estimates on steel tower 100 feet high and 75,000-gallon tank and 10,000 feet of six-inch water main. Address S. S. Rozier, intendant.

Wire-working Machinery.—See "Mattress Machinery."

Woodworking Machinery.—C. L. Michael, Morgantown, W. Va., wants addresses of manufacturers of machinery for making strawberry boxes, crates, baskets, etc.

Woodworking Machinery.—J. A. Shuping Co., Morganton, N. C., wants prices on outfit for manufacturing spokes, handles, hubs, etc.

Woodworking Machinery.—T. J. Finch & Bro., Thomasville, N. C., want prices on machine for cutting thick veneers; also a second-hand self-feed rip saw.

TRADE NOTES.

Steel-Frame Construction.—Wm. B. Scaife & Sons, Pittsburgh, Pa., have been awarded contracts for furnishing the steel-frame construction for the United States navy-yard at Port Royal, N. C. The work involves a large tonnage of heavy plate girders and cylinders.

Large Order for Machine Tools.—A large contract for supplying machine tools has been received by Messrs. Manning, Maxwell & Moore of New York. The firm will supply about \$75,000 worth of machine tools for the new shop of the Wm. R. Trigg Co. at Richmond, Va.

Wire Works Increase Capital.—The Ludlow-Saylor Wire Co. of St. Louis, which just recently completed its extensive new factory, will hold a meeting in January for the purpose of increasing its capital from \$100,000 to \$100,000. This additional capital is necessitated because of the steady increase in the company's production of wire goods of all kinds.

Cross Oil Filter.—The popularity of the "Cross Oil Filter" is constantly becoming more widespread as its merits become bet-

ter known. Representative industrial concerns in all lines of production are using this filter. The American Sheet Steel Co. of New York has ordered at different times eleven of these filters. The Burr Manufacturing Co. of Akron, Ohio, manufactures the "Cross Oil Filter," and is ready to explain its many meritable qualities.

Railway and Mill Supplies.—Lowest prices compatible with good offerings is what Walter A. Zelnicker of St. Louis is presenting to his customers. Railway, mill and factory supplies constitute the Zelnicker product. The Zelnicker sales of rails have been on the increase since election day, and the general supply business never was better, as so many new companies are starting up and the old ones are bettering their plants. The outlook is that a "rush" is expected.

Build New Chain Works.—The extension of manufactures in these busy times includes almost every variety of industry. The manufacture of chains by Messrs. Jas. McKay & Co. of Pittsburgh, Pa., has been a specialty with that firm for many years. Their increasing business necessitates greatly increased facilities, and they will build an entirely new plant at McKee's Rocks. A tract of ten acres has been purchased for \$40,000 on which to locate the new works.

Mechanical-Draft News.—That the advantages of mechanical draft are recognized by experts, and that it is rapidly assuming its place as a rival and successor of chimney draft, is clearly evidenced by the fact that several of the technical schools have recently placed orders with the B. F. Sturtevant Co. of Boston for the equipment of their boiler plants with this means of draft production. In several cases the fans have been so installed as to provide opportunity for experimentally comparing the chimney with the fan.

Pipe-Bending Contracts.—The National Pipe Bending Co. of New Haven, Conn., reports that its contracts are many and constantly increasing. Its orders for 1900 have been much greater than during any year of its existence. Last month the company received an order for thirty-nine pipe coils to go to Australia; forty coils of one-and-one-half-inch extra heavy steel pipe for Cape Town, Africa, were also ordered; another order called for seventy-five expansion bends of copper ranging from one inch to four and three-quarters inches for shipment to Yokohama, Japan.

Lythite Agencies.—The country is now fully covered by agencies for "Lythite," the well-known cold-water paint, manufactured by the Frank S. De Ronde Co. of 52 John street, New York. The Southwestern agents are Messrs. Peden & Co. at Houston, Texas; the Southern Supply Co. handles the product at Mobile, Ala.; E. E. Egan of Atlanta, Ga., Prudential Building, sells in that territory; the Kansas City (Mo.) Roofing & Corrugating Co. also handles the paint, and E. G. Judah at Los Angeles, Cal., is developing a large business. Particulars of this successful cold-water paint may be obtained from any of these agents.

Gets the Ice-Plant Contracts.—The increase in the number of ice and cold-storage plants throughout the country is affording the leading contractors and manufacturers steady business. The York (Pa.) Manufacturing Co. is prominent in this department of manufacturing and installing cold-storage and ice-manufacturing plants. Its recent contracts included a 25-ton can system ice factory for shipment to Washington, N. C.; 10-ton plant for Kobe, Japan; 30-ton plant for Marion (Ind.) company, 40-ton refrigerating system for Rockland (Ill.) brewery, 25-ton ice plant at New Berne, N. C.; 25-ton refrigerating and ice-making plant for fish and oyster company at McDonoughville, La., and ammonia fittings and refrigerating piping for an Ottumwa (Iowa) concern.

Satisfactory Baling Presses.—A variety of industries find use for baling presses, and in textile mills they are indispensable. Builders of baling presses have given much ingenuity and time to perfect their product, and the line now offered comprises the most satisfactory apparatus utilized in any industry. The Boerner & Boschert Press Co. of Syracuse, N. Y., is prominent in this department of production. Its hydraulic, knuckle-joint and power-screw presses are favorably known throughout the entire country. Recent orders for these presses came from many of the new Southern cotton mills, and from established plants South and elsewhere. Orders now on the company's books are from cotton mills in Georgia, Mississippi, South Carolina, Texas, New York and Ohio; also from a South Carolina chemical company.

High-Speed Engine Builders.—On December 4 the association formed by the high-speed engine builders of the country will hold its annual meeting in New York city at Sherry's, Fifth avenue and Forty-fourth street. The afternoon session promises to be unusually interesting, as papers will be read on "The Relation Between the Engine and Generator" by representatives of the General Electric Co. and the Westinghouse Company, from the standpoints of lighting and power. Mr. Armstrong, who has given much attention to steam-engine tests, will read a paper on "The Economy of the High-Speed Engine." At this session builders of high-speed engines, whether members of the association or not, will be welcome. A dinner, also at Sherry's, will be given the members at 7 o'clock.

Counting Machines.—One of the many specialties that have appeared to economize time and labor in manufacturing and other industrial establishments is the counting machine. These devices are so constructed that a tally of the product of a machine is kept as accurately as if done by the constant counting of an attendant. The convenience of such a device is apparent. Printing works, flour mills and other plants are today largely using the counting machines as manufactured by W. N. Durant of Milwaukee, Wis. Mr. Durant offers these machines in differing forms to suit varying requirements. The "Durant Counting Machines" have been successfully marketed for twenty years; they received a gold medal at the Paris Exposition just closed. The maker will furnish further information to inquirers.

The Steam Saver.—The old slip-shod methods of using steam are rapidly going out of existence as our manufacturers introduce improvements and devices for steam-saving. Steam users who want to increase power and heating capacity a third and generally improve their power service at a minimum cost are invited to examine into the merits of the "Heintz Steam Trap." This device is manufactured by the Wm. S. Haines Co. of Philadelphia, and so confident is this maker of the trap's efficiency that it will be sent on approval to those desirous of ascertaining what the trap can accomplish. The demand for this steam trap is constantly increasing, and the Haines Company has been forced to increase its facilities for producing it. The factory is now located at Eighteenth and Hamilton streets, and the output is much larger now than heretofore.

Chief Engineer for Westinghouse.—Asa M. Mattice has been appointed chief engineer of the Westinghouse Electric & Manufacturing Co. Mr. Mattice was for ten years, up to a year ago, principal assistant to E. D. Levitt of Cambridgeport, Mass., and has been actively connected with the design of all the large machinery coming from Levitt's office during that time. During the past year he has been remodeling mills at Dover, N. H. Mr. Mattice is an engineer graduate of the Naval Academy, class of '74, of which B. H. Warren, vice-president of the Westinghouse Company, is also a member. As assistant to Admiral Melville at the beginning of the new navy Mr. Mattice had an important part in the design of the machinery of the Maine, San Francisco and others of the important early ships. The Westinghouse Company is to be congratulated on this additional strength to its already strong engineering staff.

Southern Portland Cement.—The manufacture of Portland cement has not been neglected in the South, and an appreciable amount of the quantity consumed comes from that section. The constantly-increasing use of this cement develops many extensive orders for the manufacturers. The Virginia Portland Cement Co. has been manufacturing "Old Dominion Portland Cement" for some years, and the brand is well known to dealers and consumers as possessing those properties absolutely requisite in such a product. The Wm. G. Hartranft Cement Co. of Philadelphia (office in Real Estate Trust Building), sole selling agent for the company, is prepared to submit prices. The location of the works in Virginia permits of the lowest freight rates to the South, and this should especially interest Southern cement users. As a constant reminder of "Old Dominion" cement the agent has issued for its customers, present and prospective, a rubber dating stamp of neat design, showing the company trademark.

TRADE LITERATURE.

About Fire Insurance.—The monthly report of the Boston Manufacturers' Mutual Fire Insurance Co. of 31 Milk street, Boston, contains items of interest to those who insure, especially to textile-mill owners.

Set of Blotters.—The Boston Belting Co. of Boston, Mass., has issued a set of blotters to advertise their wares. Unlike many advertisements of this sort, the blotters are really good blotters and will absorb ink on either side. The company manufactures belting, hose and a variety of other rubber goods.

Wheelbarrows, Carts and Iron Work.—The usefulness of wheelbarrows is adapted to varying industries and construction work, and makers of these vehicles have greatly perfected them. A comprehensive line of steel wheelbarrows, lumber carts and similar goods is the specialty of the Archer Iron Works of Chicago. This company issues a catalogue of its wares and refers to its facilities for the construction of building iron work.

Pipe and Other Foundry Product.—Plumbers, architects and others using or having to order soil pipe and other foundry product will find of interest a catalogue just issued. This publication shows a complete line of soil pipe and fittings, sinks, drinking fountains, heavy castings, etc., offered by the manufacturer at prices thoroughly consistent with conditions now prevailing. The Chattanooga (Tenn.) Pipe & Foundry Co. is the publisher of the catalogue.

Inclinable Power Presses.—Manufacturers of sheet-metal goods have known favorably of the "Bliss Inclinable Power Presses" for more than twenty years. Factories in America, Europe, Australia and South America have employed these presses with success. The range of work for which they are adapted is very wide. Some recent improvements have been made in these presses and are referred to in a pamphlet just issued by the E. W. Bliss Co. of Brooklyn, N. Y., the builder.

First Calendar for 1901.—The first calendar of the season has been received at this office. Its neat size and the colored reproduction combine to form a calendar that will probably not be surpassed by any issued for 1901. The reproduction is entitled "After a Long Silence," and represents husband and wife in the "sere and yellow leaf," the wife reading to the companion of her youthful and mature years. The lighting up of the features of the aged couple and the accompanying coloring make a lifelike picture. The Garfield Oil Co. of Cleveland, Ohio, issues this calendar.

Flexible Metallic Tubing.—There can be no doubt but that flexible metallic tubing is destined to a general usage throughout this country. This tubing is so constructed that it will not kink, crunch, burn or char, and will convey air, gases, water, acids and many other liquids which soon destroy rubber hose. The uses of a flexible metallic tubing are manifestly so numerous that but mere reference to the product is sufficient to interest possible buyers. Messrs. Sharp, Klumph & Sisson of 1104 Monadnock Block, Chicago, have issued a booklet in reference to a flexible metallic tubing they import.

Metal Planers.—Metal-working establishments find it necessary, in order to produce the best possible product in their line, to maintain equipments of the most modern type. Metal planing is one of the principal operations in these plants, and machinery for that purpose is of such importance that manufacturers have given it special attention. The Cincinnati Planer Co. of Cincinnati, Ohio, has made the construction of high-grade metal planers its exclusive specialty, and the original and patented features of these machines have earned for them a reputation of the highest degree. The 1901 catalogue of this company is ready for mailing to those desirous of learning the facts concerning "Cincinnati Planers."

Motors for Electric Vehicles.—The growing favor with which self-propelled vehicles are being received has resulted in important improvements in those products. Experience has demonstrated that electric motors constitute a most satisfactory medium for operating the vehicles, and consequently that class of apparatus is widely used. One of the most prominent of electrical manufacturers is the Sprague Electric Co. of 527 West Thirty-fourth street, New York, and it has furnished Lundell motors for electric vehicles with signal success. Bulletin 204 tells succinctly of the features of construction of these motors, and explains what they are capable of accomplishing. Manufacturers of electric vehicles are invited to correspond.

Damascus Bronze—A Bearing Metal.—Getting down to facts without loss of time is what every busy man asks of those who have business transactions with him. The Damascus Bronze Co. of Pittsburg, Pa., gets

down to facts immediately in its business booklet concerning its product. This latter is "Damascus Bronze," bearing metal for locomotive driving-boxes, main rod and car bearings and other places where durability is necessary in the bearing. This bronze is simply an alloy composed of copper, tin and lead, and it is soundly guaranteed not to cut the journal. Various large railroad systems in the United States and Canada are using this bearing metal with the greatest satisfaction. Booklet entitled "About Damascus Bronze" is free to those interested.

Drawing Instruments.—The accuracy, elegance, speed and even the success of the draughting done by the professional man is in a large measure dependent upon the quality of the instruments which he uses. The nearer such instruments approach to perfection the nearer can the draughtman's work approach perfection. In acquiring a complete set of drawing instruments it is certainly greatly to the advantage of the architect or any other class of designer to secure only that which is the very best in its form, proportion, material, construction and finish.

The first cost is of little importance, because the instruments can be and are used throughout the career of the professional man. "Altendorf" instruments have for years been recognized by the profession as possessing the requirements mentioned above, and they comprise the tools of a large number of draughtsmen. These instruments have many special features not found in other makes. They are manufactured by Messrs. Theo. Altendorf & Sons of 945 Ridge Avenue, Philadelphia, who have just issued a new catalogue, which applicants are welcome to.

Steel-Plate Fans.—It may be confidently stated that the steel-plate fan is recognized as the standard type for all purposes of ventilation, heating and mechanical draft where a large volume is desired without excessive speed or pressure. Descriptions and illustrations of fans of this class are therefore of great interest not only to present and prospective users of such equipment, but also to engineers who may not have met with them in their practice. The B. F. Sturtevant Co. of Boston is a pioneer manufacturer in this department of mechanical apparatus, having been established over a third of a century. Its product has met with an extensive use. Catalogue No. 96 is devoted exclusively to the types of fans constructed at the Sturtevant works, and reference is made to the fact that the company has designed numerous special fans, and is prepared to suggest the possibilities of adaptation to specific conditions which may arise.

Various forms of steel-plate electric fans are mentioned, this latter class being one that constantly finds new adaptations as the use of electricity as a motive power is extended. Copy of the catalogue is free to interested parties.

Myths and Fables of Today. By Samuel Adams Drake. Publishers, Lee & Shepard, Boston.

In spite of intellectual advancement of race, humans cannot escape the influences of the myths and fables which have been handed down by word and mouth from the early twilight of civilization. As children they have them instilled into their minds by parents or nurses, or in some way seem to absorb them without the intervention of older persons. As they grow older they are inclined to live out such fancies, and yet we recall them with a great deal of pleasure. In this volume Mr. Drake presents an adequate review of the myths in a way attractive to grown-up children as well as to little ones.

Among the articles in *Cassier's Magazine* of illustrated engineering for December are "Electricity at the Paris Exposition," by C. S. Vesey Brown; "Industrial Combinations in the United States—Labor, Intelligence and Money," by Charles R. Flint; "Machine Tools at the Paris Exposition," by Joseph Horner; "The Steam Automobile," by J. A. Kingman; "Motive Power and Industry," by Alton D. Adams; "Machinery in Agriculture—Labor-Savers for the Farmer," by George Ethelbert Walsh, and "The Development of the Gas Engine," by Robert S. Ball, Jr., A. M. Inst. C. E.

FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

New Corporations.

C. D. Smith is interested in the Bank of Potosi, recently formed at Potosi, Mo., with \$15,000 capital stock.

W. B. Stewart and others are interested in the First National Bank being formed at New Boston, Texas, with \$30,000 capital stock.

J. A. Hudson is interested in the Kansas & Missouri Investment Co., incorporated at Versailles, Mo., with \$50,000 capital stock.

The Owensesville Bank, recently organized at Owensesville, Mo., is capitalized at \$10,000. Among those interested is C. W. Mellies.

The Raleigh Linn & Trust Co. has been formed at Raleigh, N. C., by Joseph B. Batchelor and others, with \$10,000 capital stock.

Arrangements are being made to organize a bank at Hertford, N. C., with \$15,000 capital stock. Among those interested is G. T. Skinner.

The Farmers and Producers' Bank has begun business at Salem, W. Va. S. Brundwater is president, and H. B. McKinley, cashier.

Thomas Blackwell has been elected president, and A. L. Jones, vice-president, of the new bank at Clay, Ky., organized with \$15,000 capital stock.

Charles A. Welhausen is president, and Philip Welhausen, cashier, of the First National Bank, recently formed at Shiner, Texas, with \$50,000 capital stock.

The Livingston County Bank is the title of a new organization at Smithland, Ky. D. A. Dunn is president; David Adams, vice-president, and Charles A. Lowery, cashier.

The Bank of Horatio, recently organized at Horatio, Ark., has been incorporated, with \$25,000 capital stock. E. G. Williamson is president; J. S. Lake, vice-president, and F. M. Smith, cashier.

The Citizens' Bank has been organized at Monticello, Ark., with \$50,000 capital stock. The following officers have been elected: V. J. Trotter, president; D. T. Hyatt, vice-president, and J. D. McCloy, cashier.

A movement is under way in Baltimore to organize a trust company under the title of the National Trust Co. A charter has been secured under the laws of Delaware, and the company is capitalized at \$1,000,000. Among those interested are Hon. George Savage and J. H. Purnell.

Arrangements are being made to organize another national bank in New Orleans under the title of the Commercial National Bank, with \$300,000 capital stock. W. Mason Smith is one of the promoters. The Dime Savings Bank, which has been organized at Durham, N. C., is being promoted by James E. Shepherd and several other colored residents of the town.

New Securities.

There is a possibility that the city of Petersburg, Va., may place on the market \$75,000 in 4 per cent, improvement bonds.

The issue of \$30,000 in improvement bonds of Brazoria county, Texas, has been taken for the State school fund at par.

The town of Terrell, Texas, will vote December 12 on the question of issuing \$18,000 in bonds for improvements. Ad-dress the mayor.

The town of Brenham, Texas, will vote December 4 on the question of issuing

\$15,000 in bonds for improvements. The mayor may be addressed.

Proposals will be received until December 12 for the issue of \$12,000 in 4 per cent, bonds of Woodstock, Va. John A. Grahl may be addressed.

It has been decided by the town authorities of Webster Groves, Mo., to issue \$25,000 in bonds for improvements. The town clerk will give further information.

The commissioners' court of Denton county, Texas, has decided to issue \$74,000 in 4 per cent, refunding bonds. It is stated that the issue will be sold to Dallas investors at par and accrued interest.

The issue of \$250,000 of Atchafalaya (La.) levee bonds has been purchased by the Germania Savings Bank of New Orleans. Bids were received from a number of representatives of investors, but the bid of the Germania Bank amounted to \$270,000, and was the highest.

Financial Notes.

Arrangements have been made by the Merchants' Bank of Scottsboro, Ala., to absorb the Jackson County Bank of the same town.

The Merchants' National Bank of Baltimore has issued a neat pamphlet, "Banking Hints to Our Customers," containing interesting facts about the history of operations of the bank for sixty-four years under the State bank system and under the national banking act, and also valuable suggestions for anybody having business with a national bank.

SOUTHERN COTTON-MILL STOCKS.

Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for Week Ending November 26.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.)	97	101
Aiken Mfg. Co. (S. C.)	95	98
American Spinning Co. (S. C.)	100	110
Anderson Cotton Mills (S. C.)	130	150
Arcade Cotton Mills (S. C.)	100	101 1/2
Arkwright Mills (S. C.)	122	126
Augusta Factory (Ga.)	82 1/2	88
Brown & Root (S. C.)	80	84
Bolton Mills (S. C.)	104	105 1/2
Bennettsville Mfg. Co. (S. C.)	105	112 1/2
Cannon Mfg. Co. (N. C.)	181	190
Cabarrus Cotton Mills (N. C.)	148	155
Clifton Mfg. Co. (S. C.)	180	190
Courtenay Mfg. Co. (S. C.)	117	120
Darlington Mfg. Co. (S. C.)	97	101
Delgado Mills (N. C.)	100	102 1/2
Eagle & Phenix Mills (Ga.)	104	107
Edna Cotton Mills (N. C.)	120	125
Edna Mfg. Co. (S. C.)	120	125
Enterprise Mfg. Co. (Ga.)	100	103 1/2
F. W. Poore Mfg. Co. (S. C.)	124	127
Gaffney Mfg. Co. (S. C.)	122 1/2	125
Granby Mills (S. C.)	100	102
Granby Mills (S. C.) 1st Pfd.	104	106
Granby Mills (S. C.) 2d Pfd.	169	165
Graniteville Mfg. Co. (S. C.)	102	104
Greenwood Cotton Mills (S. C.)	101 1/2	105
Grendel Mills (S. C.)	120	125
Henderson Cotton Mills (N. C.)	104	106
Hendrie Mills (N. C.)	107	110
John F. King Mfg. Co. (Ga.)	100	103
Langley Mfg. Co. (S. C.)	115	120
Laurium Cotton Mills (S. C.)	115	150
Lockhart Mills (S. C.)	109	112 1/2
Louis Mills (N. C.)	123	128
Lynchburg Cotton Mills (Va.)	145	150
Lynchburg Cotton Mills (Va.) Pfd.	145	150
Manchester Cotton Mills (S. C.)	110	115
Mayo Mills (N. C.)	125	130
McColl Mfg. Co. (S. C.)	120	125
Modena Cotton Mills (N. C.)	142	145
Newberry Cotton Mills (S. C.)	115	121
Orr Mfg. Co. (S. C.)	103 1/2	106
Odele Mfg. Co. (N. C.)	110	116
Pacolet Mfg. Co. (S. C.)	250	275
Pelzer Mfg. Co. (S. C.)	189	185
Pleasanton Mfg. Co. (S. C.)	175	180
Raleigh Cotton Mills (N. C.)	120	125
Richland Cotton Mills (S. C.)	99	102
Richland Cotton Mills (S. C.) Pfd.	100	105
Ronoke Mills (N. C.)	106	110
Sibley Mfg. Co. (Ga.)	85	88
Southern Cotton Mills (N. C.)	93	97 1/2
Spartan Mills (S. C.)	130	138
Triad Mfg. Co. (Ga.)	125	150
Tucupan Mills Co. (S. C.)	128	138
Union Cotton Mills (S. C.)	157	140
Union Cotton Mills (S. C.) Pfd.	101	104
Victor Mfg. Co. (S. C.)	109	112
Victor Cotton Mills (N. C.)	70	76
Warren Mfg. Co. (S. C.)	83	90
Warren Mfg. Co. (S. C.) Pfd.	104	107 1/2
Wilmington Cotton Mills (N. C.) Pfd.	110	115
Wissacott Mills (N. C.)	120	126
Whitney Mfg. Co. (S. C.)	122 1/2	130

real safeguards, though weakened at times by her childish impetuosity and ability to show fierce anger when occasion demands. She is the center of plots and counter-plots in which decadent royalty, abandoned nobility and scheming priesthood are involved, and which, in their evolutions, produce many dramatic, if not rather startling, situations. The story is told in the language of the seventeenth century, which usually is read nowadays through colored glasses, or at least after a thorough disinfection.

The Christmas number of *Scribner's Magazine* shows three different kinds of color-printing. The cover is an elaborate design by Maxfield Parrish, which it has taken nine printings to reproduce. The frontispiece is a delicate reproduction in color of a painting of a mother and child by Jessie Wilcox Smith, and in the body of the magazine, in a very illuminating article by the distinguished art critic, John La Farge, on "Puvis de Chavannes," are six full-page pictures of some famous decorative paintings by Puvis. These have been most faithfully reproduced in the colors of the originals.

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